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TREATISE

OF THE

PLAGUE:

CONTAINING

AN HISTORICAL JOURNAL, AND MEDICAL ACCOUNT, OF THE PLAGUE, AT ALEPPO, IN THE YEARS 1760, 1761, AND 1762.

ALSO,

REMARKS ON QUARANTINES, LAZARETTOS, AND THE ADMINISTRATION OF POLICE IN TIMES OF PESTILENCE.

TO WHICH IS ADDED,

AN APPENDIX,

CONTAINING

CASES OF THE PLAGUE; AND AN ACCOUNT OF THE WEATHER, DURING THE PESTILENTIAL SEASON.

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A

TREATISE

OF THE

PLAGUE.

BOOK III.

Of Peſtilential Contagion.

CHAP. I.

Objections to the Doctrine of Contagion conſidered—Remarks on the Conduct of the Controverſy—Various Senſes of the Term Contagion—Other Diſeaſes confounded with the Plague.

THE queſtion whether the plague be a contagious diſtemper, has in former times been much agitated, and, from the abſtruſe nature of the ſubject, afforded ſuitable exerciſe for ſpeculative minds, in the retreats of ſcholaſtic medicine. But it was leſs to be expected that phyſicians who had been engaged in practice among the infected, ſhould have perſiſted in the opinion that the plague was never communicated by contagion.

Yet this appears to have been the caſe with ſome of the French phyſicians in the plague of Provence, in the year 1720; who, through the whole of their remarks on the diſeaſe, labour aſſiduouſly to ſhow that it aroſe from corrupt humours bred in the body,

body, in conſequence of irregularity in the ſeaſons and bad aliment; that it was ſpread by the ſame means, in concurrence with terror, grief, deſpondence, or other debilitating affections of the mind; but was neither bred nor diſſeminated by contagion.[1]

For this purpoſe, thoſe gentlemen are at great pains in their narrative of peſtilential caſes, to mark ſtrongly ſuch circumſtances as ſeem to countenance the favorite hypotheſis;[2] but more eſpecially in caſes where the vulgar opinion would have been apt to ſuſpect contagion:[3] and while they paſs ſlightly over, or omit all mention of numbers of the medical aſſiſtants whom they ſaw periſh in the exerciſe of their profeſſion, they produce, as an irrefragable argument againſt contagion, their own eſcape unhurt, amid circumſtances of ſuppoſed danger.[4]

M. Deidier,

[1] Traité de la Peſte, p. 483, 528, 267, 317.
[2] Ibid. p. 244, 345, 300, 306.
[3] Ibid. p. 245, 269, 283 and 287, 308, 332, 334 and 341, 469, 475.
[4] Ibid. p. 307, 325, 355, 523.

It may be remarked here, that M. Chirac, the Regent's phyſician, in 1720, ſtrenuouſly oppoſed the opinion generally received, that the plague at Marſeilles had been imported from the Levant, and was propagated by contagion. Meſſrs Chicoyneau and Verny, who, probably through M. Chirac's intereſt, were appointed by the court to go from Montpelier to Marſeilles, would ſeem to have gone determined to ſupport their patron's hypotheſis; as may be inferred from the pains taken in many inſtances, to ſhow how the diſeaſe was produced, independently of contagion. See Traité de la Peſte. Obſ. 2d. p. 246 and 260. Obſ. p. 308, 313, 317, and 333.

So late as the year 1778, Profeſſor Stoll, of Vienna, has written expreſſly againſt the doctrine of peſtilential contagion. But as from the queries propoſed by that gentleman, to the conſideration of the learned, he would ſeem to have beſtowed little attention on the writers by whom the points he propoſes have been diſcuſſed; I conceive it fully ſufficient to tranſcribe the late Mr. Howard's very ſenſible remark on the ſubject, without entering into a further refutation of the Profeſſor's raſh opinion. "It "appears very ſtrange and ſuſpicious (ſays Mr. Howard) that he ſhould go back to "Livy's Roman Hiſtory for proofs to eſtabliſh his point, totally neglecting all the "facts concerning the numerous viſitations of the plague recorded in modern medical "books, or which had happened during his own time. I ſuppoſe profeſſional men "will lay very little ſtreſs upon all that can be ſaid of peſtilential diſeaſes, in general,

M. Deidier, who had adopted the ſame opinion, having found by experiments that the plague could be communicated to dogs, by injecting peſtiferous bile into their veins, found himſelf in the ſequel, under the neceſſity of acknowledging the plague to be contagious: not however in the ſenſe commonly received; for he reſtricts it to a long continuance near a ſick perſon, the drawing in repeatedly his infectious breath, the putting on his ſhirt or linen, the lying in the ſame bed clothes, and the touching a wounded part of ones own body, with hands embrued with the ſweat or blood of one infected.[5] CHAP. I.

It may be remarked here, that in as much as M. Deidier allows the breath and ſweat to be infectious, he cannot help admitting, in ſome degree, an infectious atmoſphere ſurrounding the ſick body; and in allowing the linen of the ſick capable of imbibing and imparting the infectious effluvia, he clearly admits contagion by a fomes: but what is ſtill more remarkable, he allows the infection may be contracted by a perſon handling the buboes or carbuncles, whoſe finger may happen to be wounded; notwithſtanding the pains he had taken in another place to ſhow that the purulent matter of the eruptions was not infectious.[6]

After all theſe conceſſions, as if reluctant to depart from his former opinion, he affirms that the atmoſphere of a perſon in the plague, is no more to be dreaded than that of a venereal patient; and that touching or dreſſing the buboes and carbuncles is not attended with the leaſt danger.[7] An aſſertion boldly hazarded! But if once the operation of peſtilential effluvia, from the lungs

" which happened in wars and ſieges two thouſand years ago, as applied to the plague " properly ſo called, a diſeaſe then confounded with various others; from which the " accuracy of later obſervations have ſufficiently diſcriminated it. On Lazarettos, p. 42. Warrington, 1789.

[5] Traité de la Peſte, p. 356.
[6] Ibid. p. 519.
[7] Ibid. p. 357.

or

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or the ſurface of the body, be admitted, it is more than probable, that in adjuſting the requiſite conditions of infection, the too long ſtay, and too near the ſick. "Le trop long tems, & de trop près,"[8] will appear conditions too indefinite to be of much utility, except in an academic diſcourſe.

It deſerves alſo to be remarked, that the converſion of M. Deidier was brought about neither by the teſtimony of phyſicians and hiſtorians, in former times, nor by the dreadful ſpread of the diſeaſe at Marſeilles, of which he himſelf was a witneſs;[9] but by his experiments on the bile. "Toute maladie qui a un moyen "immanquable de ce communiquer eſt certainement contagieuſe; "or telle eſt la peſte; donc elle eſt certainement contagieuſe.[10]

He further gives his opinion, that the diſeaſe communicated by injection to brutes, would ſtill more certainly be communicated to man, were the experiment to be made on a condemned criminal:[11] but the concluſion is certainly raſh where he ventures, without having tried any of the other fluids, to affirm the bile only capable of conveying infection in that manner.[12] He, at the ſame time, confeſſes his ignorance by what paſſages infection is received. "C'eſt un myſtere qui me parôit impénétrable & ſur lequel on ne "peut propoſer que des conjectures,"[13] but conſiders the notion of the bile being principally affected in the plague, as confirmed by diſſection. It evidently influenced his treatment of the diſeaſe; and led him, in his narrative of caſes, to mark irregularity of diet, with no leſs care than Meſſrs. Chicoyneau and Verny, in their narratives, had done terror and apprehenſion.

[8] Traité de la Peſte, p. 356.

[9] Ibid. p. 348.

[10] Ibid. p. 362.

[11] Ibid. p. 362.

[12] Ibid. p. 203.

[13] Ibid. p. 522. 524.

I pay

CHAP. I.

I pay the more attention to theſe authors becauſe the wide experience to which they conſtantly refer, juſtly renders their authority reſpectable; and it is cited, on all occaſions, by ſubſequent writers. At the ſame time, the accounts of the riſe and progreſs of the plague in which they practiſed, being more full and better authenticated than any I have met with; furniſhes, of all others, the moſt entire chain of evidence on both ſides of the queſtion on contagion.

But as it is by no means my intention to enter at large into the controverſy, I ſhall refer the reader to the Traité de la Peſte, wherein the principal arguments on each ſide are collected in a ſmall compaſs,[14] and ſhall only ſubjoin ſome general remarks ariſing from the peruſal of theſe, as well as the works of various other writers on the ſame ſubject: at the ſame time keeping matters of fact principally in view, and purpoſely avoiding diſquiſitions merely theoretical.

I. In the firſt place, the various and vague application of the term contagion has been the ſource of confuſion. In foreign languages, as well as in Engliſh, it has ſometimes been uſed for the plague itſelf; ſometimes as ſynonimous with infection; ſometimes for the virulent effluvia iſſuing from the ſick, or from ſubſtances infected; and ſometimes merely as a property common to various diſeaſes.[15]

Doctor

[14] Traité de la Peſte.

In favour of contagion, p. 118 to 153, p. 359, 369, 381, 450, 508, 547, 549, 552, 554, 558, 562, 564, 571, 589, p. 599, p. ii. p. 132, 134, 138, 140, 155, 160.

Againſt the ſyſtem of contagion, p. 110 to 117. p. 154, 185, 203, 206, 241, 344, 353, 467, 482, 520 to 528, p. ii. p. 121 to 128.

The two numbers, 134 and 467, deſerve particular notice.

[15] —— patet et peſtem eſſe omnium morborum qui contagione ſerpunt, etiam ad diſtans, contagioſiſſimam, unde a noſtris contagionis ſolo nomine ſubauditur. Guil. Beaumontenſis de Peſte, lib. i. 1629.

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Doctor Mead, in the firſt Edition of his Diſcourſe on the Plague, ſays that, "Contagion is propagated by three cauſes, the air, diſeaſed perſons, and goods tranſported from infected places."[16] Upon this paſſage, a writer, who at the time attacked the Doctor's book with illiberal ſeverity, obſerves "that according to Doctor Mead, air and his other cauſes propagate or ſpread contagion, not the plague; and therefore either contagion and the plague are the ſame, or elſe the plague is not conſidered: if the firſt, then his cauſes propagate the plague; and the plague accompanies the plague; an excellent defence. But if the plague is out of the play, then contagion accompanies nothing."[17] This laſt ſarcaſm was in reply to a pamphlet in defence of Mead, which aſſerted that contagion and infection were ſynonimous terms; and that the diſcourſe in treating of the cauſes that ſpread the plague, treated conſequently of the contagion which accompanies it.[18]

La peſte, uno dei piu terribili mali che poſſano affligere il genere umano, benche non ſia propriamente lo ſteſſo che il contagio, pure ſuole avere fra noi il nome di *contagio* perche toccare i corpi, o l'aria degli appeſtati; o le merci, o robe, loro, ſe ne infettano i ſani, con piu forza e ſtrage che non accade in altri morbi epidemici & attaccaticci—il perche contagio ſuo l'anche appellarſi la peſte. Muratori della Peſte, Edit 4. 1743.

"The plague, one of the moſt dreadful evils that mankind can be afflicted with, "though not properly the ſame with contagion, is nevertheleſs, amongſt us, uſually "known under that name; for by touching the bodies, or even the air ſurrounding "them, of thoſe ſick in the plague, or their goods, clothes, or other things about "them, perſons in health become infected more violently and fatally, than happens "in other epidemic and contagious diſeaſes. On which account contagion is alſo "called the plague."

"The manner of the peſtilential matter's operation, is called contagion or infection; "and by metonymy, putting the cauſe for the effect, we uſually call the matter itſelf "ſo, as having the virtue of contagious operation in it."

An Hypothetical Notion of the Plague by Mr. Place, Lond. 1721.

[16] A ſhort Diſcourſe concerning Peſtilential Contagion, Ed. vii. p. 2. Lond. 1721.

[17] Diſtinct Notions of the Plague, &c. by the Explainer. Lond. 1722. p. 5.

[18] Some Remarks on three Treatiſes of the Plague, &c. Lond. 1721. p. 11.

The Doctor, however, who ſeems ingenuouſly to have profited of the ſtrictures made by his numerous adverſaries, thought proper, in order to avoid future cavil, to ſubſtitute plague for contagion, in the ſubſequent edition of his book.[19]

The ſame anonymous Author who had attacked Doctor Mead on this point, endeavours, from Fracaſtorius, to eſtabliſh, what he thinks, a more accurate notion of contagion. "When phy-
"ſicians ſpeak of contagion, they ſpeak of the μίασμα, inquinamen-
"tum, or infection paſſing from one thing, or one perſon, into
"another. Contagion always ſuppoſes two things. One from
"which the infection paſſes, and another which receives it. A
"perſon who dies of poiſon may be ſaid to be infected; but by no
"means that he has received his death by contagion.—When an
"infected perſon conveys to another the diſeaſe wherewith he is
"infected, and that by the touch, the ſecond perſon is ſaid to
"catch the diſeaſe, or to take it by contagion. When then we
"put the queſtion of the plague or any other diſeaſe being conta-
"gious, we are bound to determine from experience, as in the
"caſe of other contagious diſeaſes, what we know in fact of the
"plague being conveyed by contact, or contagion; which queſ-
"tion is then rather a queſtion of fact, than of phyſick. As
"alſo that the word contagion ſignifies nothing, as often as we
"find it by itſelf, or that it is carried, or conveyed upon, or in
"any thing whatſoever.[20]

That the queſtion whether the plague be a contagious diſeaſe, is rather a queſtion of fact than of phyſick, is very true; but the ſenſe to which the Author, in the above paragraph, would limit the word contagion, is certainly not ſtrictly conſiſtent either with the language of the ſchools, or with that of phyſicians: nor are

[19] Mead's ſhort Diſcourſe, 8th Ed. 1722. p. 41.

[20] Diſtinct Notions Notions of the Plague, with the riſe and fall of Peſtilential Contagion, p. 7 and 8, by the Explainer, Lond. 1722.

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thoſe guilty of a ſoleciſm who talk of various contagions, or of their being conveyed from one place to another, or of their operation under different circumſtances.

A celebrated modern Profeſſor reckons miaſmata and contagions amongſt the principal remote cauſes of fever. Miaſmata may ariſe from various ſources; but the miaſma ſo univerſally the cauſe of fevers, he ſuppoſes to be that which ariſes from marſhes or moiſt ground, acted upon by heat. Contagions ariſe from human effluvia in a virulent ſtate. "We have ſuppoſed that miaſmata "are the cauſe of intermittents, and contagions the cauſe of con- "tinued fevers, ſtrictly ſo named; but we cannot with propriety "employ theſe general terms. The notion of contagion properly "implies a matter ariſing from the body of man under diſeaſe; "and that of miaſma a matter ariſing from other ſubſtances. "But, as the cauſe of continued fevers may ariſe from other ſub- "ſtances than the human body, and may in ſuch caſes be called "a miaſma; and as other miaſmata alſo may produce contagious "diſeaſes, it will be proper to diſtinguiſh the cauſes of fevers, by "uſing the terms marſh or human effluvia, rather than the ge- "neral ones miaſma or contagion."[21]

I regret the having had no opportunity of hearing the theory reſulting from theſe diſtinctions fully explained, more particularly in their application to the plague, which the Author claſſes among the diſeaſes ariſing from a ſpecific contagion.

The contagions, though ſpoken of as a matter floating in the atmoſphere, are never (as the Profeſſor obſerves) "found to act "but when they are near to the ſources from whence they ariſe; "that is, either near to the bodies of men, from which they im- "mediately iſſue, or near to ſome ſubſtances, which, as having "been near the bodies of men, are imbued with their effluvia,

[21] Firſt Lines of the Practice of Phyſic, by W. Cullen, V. i. Edinb. 1777. p. 66, 72.

"and

" and in which ſubſtances theſe effluvia are ſometimes retained in " an active ſtate for a very long time. The ſubſtances thus im- " bued with an active matter, may be called fomites; and it ap- " pears to me probable, that contagions as they ariſe from fomites, " are more powerful than as they ariſe immediately from the " human body."[22]

How far the Profeſſor's conjecture may be juſt, I ſhall not pretend to determine. I ſhould be inclined to doubt that the peſtiferous effluvia of a perſon labouring under the plague, after the having been ſhut up ſometime in a ſubſtance fitted to imbibe and confine them, would act more powerfully on a perſon diſpoſed to infection, than the ſame effluvia would have done at the inſtant of their emanation from the morbid body. Doctor Lind and others are, however, of the Profeſſor's opinion.[23]

But whatever may be the opinions entertained on this point, or however expedient the ſubſtitution of the terms marſh and human effluvia, for miaſma and contagion, may be in a general theory of fevers, the change does not appear neceſſary in reſpect to the plague, where miaſma, atoms, effluvia, ſteam, particles, vapour, have hitherto been promiſcuouſly employed to expreſs the contagious or infectious emanation; and may, by the epithet peſtiferous, be ſufficiently diſtinguiſhed from variolous or other contagions, without aſſuming, as a fact, that the plague is bred or produced originally from vitiated human effluvia: a matter which, hitherto, has by no means been eſtabliſhed on proper authority.

[22] Cullen's Firſt *Lines*, p. 73.

[23] " By a fixed attention to this ſubject for ſome years paſt, I am convinced that the " body of the diſeaſed kept exactly neat and clean, is not ſo liable to impreſs the taint, as " his late wearing apparel, dirty linen, and uncleanlineſs of any ſort about him long " retained in that impure ſtate.—I ſay, theſe laſt contain a more concentrated, and " contagious poiſon, than the newly emitted effluvia or excretions from the ſick." Eſſay on the Health of Seamen, p. 221. Van Sweiton, Commentar. S. 1409. p. 182.

Waving

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Waving therefore a diſquiſition into the cauſes which might originally have bred the plague in a country where it may be ſuppoſed to be indigenous, as alſo the attempt of analyzing the matter of contagion, or noxious effluvia by which the diſeaſe is ſuppoſed to be communicated or ſpread; it will be ſufficient to enquire whether the infection be not communicated from a ſick to a ſound perſon, by immediate contact; whether it be not alſo communicated at ſome diſtance, through the medium of the air; and whether ſubſtances of various kinds do not imbibe the infectious effluvia, and retain them for a conſiderable time. So far as theſe points admit of proof from the experience of times paſt, the queſtion concerning peſtilential contagion will admit of ſolution, independent of all theoretical reaſoning whatever.

II. Another ſource of embarraſſment on the ſubject of contagion, has been the confounding the true plague with other epidemical diſtempers of fatal malignancy. The ancient hiſtorians as well as medical writers, blended various epidemical diſtempers, when they proved to be remarkably deſtructive, under one general title of plague;[24] and though in latter times, the true plague has been more accurately diſtinguiſhed as a particular diſeaſe characteriſed by its proper ſymptoms and eruptions,[25] ſome Moderns, adhering to the ancient nomenclature, ſtill contend that it differs only in degree of violence from other epidemic diſeaſes, "and conſequently any epidemic ſickneſs that rages with more than ordinary violence, and which occaſions an extraordinary mortality amongſt mankind, may be, and is properly termed a peſtilence or the plague."[26]

[24] On this ſubject ſee Pringle on Diſeaſes of the Army. Ed. p. 328, 348. Huxham on Fevers, p. 92, 110. Lind's Eſſay on the Means of preſerving the Health of Seamen, &c. p. 200. Cullen Synopſis & Norclog. p. 71. Firſt Lines, V. i. p. 61.

[25] Cullen Synop. p. 134. Firſt Lines, Ed. 2. p. 14. Mead on the Plague, p. 5, 8, 20, 21, and 33.

[26] A Diſcourſe of the Plague by G. Pye, M. D. Lond. 1721. p. 3.

The

The references at the bottom of the preceding page, renders it unneceſſary to ſay any thing more on this head, than merely to remark that unleſs diſtinction be ſcrupulouſly preſerved, circumſtances belonging to what are commonly termed malignant or peſtilential fevers, will often come to be very improperly applied to the true plague.

III. It may be remarked thirdly, that thoſe who contend in favour of contagion, have ſometimes from zeal for accumulating proofs, collected a number of facts from hiſtorical records of very unequal authority, and often with little critical ſkill in diſcrimination. Of this error their antagoniſts availing themſelves, have ſelected from the maſs the inſtances moſt liable to doubt or objection, and have endeavoured by their manner of arranging them, to place the whole in a ridiculous light: while more important inſtances are either evaſively paſt over, miſtated in the repreſentation, or invalidated by general declamation on the little credit due to hiſtorians in matters of phyſick; or the prejudices prevalent in ancient times of ignorance; and on the contradictions to be found in the arguments of thoſe who ſupport the ſyſtem of contagion.[27]

IV. The mingling hypothetical and abſtruſe reaſoning on the nature of peſtilential effluvia, and their manner of operation, with matters of obſervation and experience, may be reckoned a fourth cauſe of embarraſſment. It calls the attention off from the main queſtion, and entangles it in ſpeculations which ought ever to be kept diſtinct. It leaves acceſs to the various arts of controverſy; facts are ſelected to anſwer the preſent purpoſe, and ſometimes ſtated with much partiality: inferences are raſhly drawn from diſtant analogies; and what ought to be a calm enquiry in purſuit of truth, deviates into a wrangling conteſt for victory.

V. Laſtly, the queſtion when reduced within its proper bounds, ſeems to have been properly reſolved in the affirmative; but ſhould

[27] Traité de la Peſte, p. 110, 154, 159, 176.

doubts

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doubts ſtill remain after reading the extract from M. Aſtruc,[28] the means to which the Montpelier phyſicians have been obliged to have recourſe in ſupporting a contrary opinion, their miſtating of circumſtances, and the partiality ſo evidently diſcernible in their narrative of caſes, will ſerve more effectually to remove any ſuch doubts, than any arguments that could be urged againſt their hypotheſis.

Having premiſed theſe general remarks on a controverſy, which I have declined entering theoretically into; and given my opinion on the deciſion of the queſtion under its proper limitation; I am nevertheleſs ready to acknowledge, that the received doctrine of contagion is ſtill attended with ſome difficulties, which have not hitherto been accounted for. Theſe certainly remain fit ſubjects for future enquiry; but do not appear to be objections of force to invalidate facts already eſtabliſhed. It is well known, at preſent, that the ſame perſon who has been inoculated two or three times for the ſmall-pox, without effect, even in an epidemical ſeaſon, has afterwards received the infection, upon repeating the operation at a diſtance of time when the diſeaſe was hardly ſporadic. The cauſe of this remains unknown; but ignorance of it was never produced as an argument againſt the reality of variolous contagion.

If of one hundred perſons expoſed to the infection of the plague by a near approach to the ſick, ninety ſhould fall ſick, ſhall human inability to aſſign ſatisfactory reaſons for the preſervation of the other ten, be converted into a poſitive argument againſt the diſeaſe having been caught by contagion! If perſons retired from all commerce with the infected and their attendants, breathing the ſame air with the reſt of the inhabitants, and nouriſhed by the ſame aliment, remain untouched during the ravage of the plague, as long as they continue ſecluded, but upon unguarded communication are taken ill like

[28] Traité de la Peſte, p. 118, 153.

others;

others; can any rational doubt ariſe about the cauſe of their former ſecurity! Or if through ſtealth, or neglect of requiſite precautions, ſubſtances tainted by the ſick ſhould be conveyed into theſe ſecluded retreats; and perſons living temperately as before, ignorant of what had happened, and conſequently in the midſt of imaginary ſecurity, happen to be ſeized with the diſtemper; can it with any ſhow of reaſon be aſcribed, not to contagion, but to terror, or to colluvies in the ſtomach and bowels, produced by intemperance and bad aliment? The inſtances here alluded to are not the creation of fancy, but ſtrictly conſonant to repeated experience in Turkey: to ſay nothing at preſent, of what has been obſerved at Marſeilles and in various cities in Europe.

But a greater difficulty than that of all perſons not being equally ſuſceptible of infection, ariſes from the ceſſation of the plague, at a period when the ſuppoſed contagious effluvia preſerved in apparel, furniture, and other fomites, at the end of a peſtilential ſeaſon, muſt be allowed not only to exiſt in a much greater quantity than can be ſuppoſed to be at once accidentally imported by commerce, but in a ſtate alſo of univerſal diſperſion over the city. The fact, however unaccountable, is unqueſtionably certain; the diſtemper ſeems to be extinguiſhed by ſome cauſe or cauſes equally unknown, as thoſe which concurred to render it more or leſs epidemical, in its advance and at its height. In Europe, ſomething may be aſcribed to the means employed for the cleanſing of houſes and goods ſuppoſed liable to retain the latent ſeeds of infection; but at Aleppo, where the diſtemper is left to take its natural courſe, and few or no means of purification are employed, it purſues nearly the ſame progreſs in different years: it declines and revives in certain ſeaſons, and at length, without the interference of human aid, ceaſes entirely. The Levant furniſhes ſome curious circumſtances relative to the termination of the plague, and I ſhall have occaſion to enter more at large on the ſubject in another place.

CHAP. II.

The Doctrine of Contagion confirmed by experience at Marſeilles—The Plague did not exiſt in the Town before the Month of May—Was imported in Merchandiſe from the Levant. Objections examined.

IT was obſerved before, that the accounts which have been tranſmitted of the laſt plague at Marſeilles, are more full, and circumſtances better authenticated, than moſt of the accounts of anterior plagues to be met with in books. It may be further remarked, that as the popular opinion of contagion was oppoſed, at the time, by ſome phyſicians practiſing on the ſpot, it may reaſonably be ſuppoſed the facts which ſeemed to favour the prevalent opinion, would undergo a ſtricter ſcrutiny, and if found not conformable to truth, would have been expoſed: but, if inſtead of ſuch detection, the moſt material are found to have been paſt over in ſilence, and little more than hypothetical reaſoning oppoſed to others, the main facts may be conſidered as eſtabliſhed, if poſſible, more firmly than they were before. This I think will appear to be exactly the caſe, upon an attentive peruſal of the Journal, and of the hiſtorical Account of the Plague of Marſeilles, joined with the paſſages in the Traité de la Peſte, already referred to.[1]

The points which, to me, appear to be clearly eſtabliſhed reſpecting the plague at Marſeilles, are the following:

1ſt. That the plague did not exiſt in France before the 25th of May, 1720.

2d. That it was imported in goods from the Levant, by a ſhip which left the coaſt of Syria the beginning of February, and arrived at Marſeilles the 25th of May.

[1] See before Chap. I.

3d. That

3d. That two days after the arrival of this ſhip, one of the ſailors died; on the 12th of June, an officer of quarantine who had been put on board, died alſo; and this was followed by the death of a cabin boy on the 23d. About the ſame time, ſome porters employed in opening the merchandiſe, in the Lazaretto, were taken ill and died; in the firſt week of July, three others fell ſick in like manner, but, in theſe, buboes were diſcovered in the axilla and groins. The ſurgeon of the Lazaretto, who had hitherto aſcribed the alarming mortality to ordinary fevers, now, for the firſt time, expreſſed his ſuſpicion, and a conſultation being held with two other ſurgeons, they, after viſiting the ſick, gave their opinion in the moſt expreſs terms to the council of health, that the three patients had the plague. This was on the 8th, and all three died next day. The prieſt who had adminiſtered to the ſick, and the ſurgeon of the Lazaretto with part of his family, were infected alſo and died.[2]

According to the hiſtorical account, the diſtemper diſcovered itſelf in the city about the 20th of June, but inſtances were rare before the firſt of July, when ſeveral accidents happened in the Rue

[2] A brief Journal of what paſſed in the city of Marſeilles. Lond. 1721.

Relation Hiſtorique, &c. p. 28. Traité de la Peſte, p. 5 and p. ii. p. 188.

Doctor Mead was of opinion, that it appeared indiſputable from the Journal of the Plague at Marſeilles, "the miſchief was brought thither by goods from the Levant." Diſcourſe, p. 47. In a book publiſhed in 1755, it is imputed to the Doctor, that the opinion of contagion would have gradually died away, had he not revived and ſupported it; "that his arguments, however, eſtabliſh nothing, nor indeed can be deemed "arguments, but they are of no ſmall weight with many people, on account of his "great credit and high character." The Title of this Book is an Hiſtorical Account of the ſeveral Plagues that have appeared ſince 1346, with an enquiry into the preſent prevailing opinion on Contagion, &c. by Dale Ingram. He is one of the lateſt writers againſt Doctor Mead; is very inaccurate in his ſtatement of facts; and has borrowed moſt of his arguments from ſome of the Doctor's early opponents.

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de l'Eſcale.[3] On the 9th Meſſrs. Piſſonel, phyſicians, gave information of a young man taken ill in another quarter of the city; the ſiſter was taken ill the next day, and the brother died. She with the reſt of the family were tranſported to the Lazaretto, where they all periſhed. It ſhould be remarked that the paſſengers on the ſhips which arrived afterwards from the Levant, the end of May and in June, notwithſtanding they brought foul patents, having performed only the uſual quarantine of ſixteen or nineteen days, were admitted into the city ſoon after the middle of June. Of theſe, one named Boyal, died with a bubo in the arm-pit.[4] From the 12th of July to the 23d, there was a deceitful pauſe, during which the popular apprehenſions began to ſubſide. The phyſicians were reproached with ignorance in having miſtaken ordinary fevers for the plague; and the precautions taken by the ſheriffs were condemned as unneceſſary. The diſeaſe however, in this interval, had continued to ſpread in the Rue de l'Eſcale, of which the council of health were informed about the 18th. A ſurgeon who was ſent to examine into this matter, declared the diſorder to be a worm fever. About the 23d the council were informed of the death of no leſs than fourteen perſons in that quarter, and of ſeveral others falling ſick. The ſurgeon adhered to his former opinion, but a phyſician, who accompanied him at this viſit, declared the diſtemper to be the plague[5]. From this time the plague ſpread in different places, and by the end of the month had

[3] Relation Hiſtorique, p. 40.

[4] Ibid. p. 43.

The Hiſtorical Relation declines the giving any deciſive opinion in what manner the plague was conveyed from the Lazaretto into the city, but it would appear, from what he ſays, it was by ſmuggling infected goods. Relat. Hiſtorique, p. 50.

[5] Relation Hiſtorique, p. 47.

There is ſome variation in dates and other circumſtances between the accounts contained in the Journal, and the hiſtorical Relation of this period of the plague; but they agree in all material points. I have chiefly followed the latter, which was written after the Journal, and enters into details, probably through delicacy omitted by the journaliſt, who had himſelf a ſeat in the council of health.

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had got into the ſuburbs. Four phyſicians were appointed to attend the infected, and all declared the diſeaſe to be the true plague; but it having been hitherto confined chiefly to the lower claſs of people, the report of the phyſicians was not credited, their perſons were inſulted in the public ſtreets, and the popular infatuation did not ceaſe till ſome of the inhabitants of better rank were taken ill. After the firſt week of Auguſt the diſtemper increaſed rapidly, and univerſal diſmay ſoon ſucceeded[6].

Such was the riſe of the plague at firſt, and its progreſs afterwards in the months of June and July; whence it appears that perſons on board the ſuſpected ſhip, thoſe employed in airing the goods, a ſurgeon and a prieſt who attended the ſick were among the firſt infected. That the paſſengers from the ſeveral ſhips, all of which ſhips, the firſt excepted, brought foul patents, were, together with their baggage, admitted into the city, after performing a quarantine of little more than eighteen days. That the diſtemper from the 20th of June till towards the end of July, advanced very ſlowly, and ſometimes ſeemed to pauſe. That it attacked chiefly the poorer ſort of people, and was found in diſtinct quarters of the city, but more particularly for ſome time among families inhabiting the Rue de l'Eſcale, where it broke out the beginning of July. And laſtly, that during the firſt forty days, few or none of the infected recovered; a circumſtance entirely conſonant to what was obſerved in the beginning of the plague at Aleppo.

The council of health had certainly an arduous taſk on their hands, and the magiſtrates in the ſequel exerted themſelves with noble reſolution; but it is clear even from the Journal, which endeavours to gloſs matters over, that they had been very remiſs in the meaſures taken at the beginning; that they truſted too long to the judgment of the ſurgeon of the Lazaretto, and ſeemed to diſcourage the information given of the firſt appearance of the diſtemper in the city; circumſtances that indicate the preponderance of private intereſt, ſo far as commercial concerns were likely to be affected, to the duty of their public ſtation.

[6] Relation Hiſtorique, p. 61.

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4th. That the diſtemper was evidently communicated from the ſick to the ſound by contagion.

5th. That thoſe who carefully ſecluded themſelves from all communication with the ſick, or with perſons and goods which had been expoſed to infection, were not attacked by the diſeaſe.

6th. That the plague began to advance rapidly in the beginning of Auguſt; raged through that and the following month, declined faſt in the courſe of October and November, and ſeemed to ceaſe in the middle of the winter. Between the month of February and July, 1721, peſtilential accidents occaſioned, from time to time, alarm in the city, but the diſtemper, to whatever cauſe it might be owing, did not ſpread; and it terminated entirely after the ſummer ſolſtice of that year.

Some of the references now drawn reſpecting Marſeilles, have been ſtrenuouſly diſputed both in France and in England; and as their truth is of material conſequence in the queſtion concerning quarantines, I ſhall conſider the principal objections made to them.

Two objections have been ſtarted to the firſt, viz. that the plague did not exiſt in France before the month of May. One, that the irregularity of the ſeaſons in the preceding year, a bad crop and unwholſome aliment, had concurred to the production of a malignant epidemic, and that theſe cauſes, joined with the popular dread of contagion, were ſufficient to account for the diſtemper at Marſeilles, without having recourſe to any other, or to imported infection[7]. This having been fully refuted elſewhere, by ſhowing that the facts aſſumed never exiſted[8], I ſhall paſs over.

[7] Traité de la Peſte, p. 205, 527.

[8] Ib. p. 210. Relat. Hiſtor. p. 24, 422.

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The ſecond deſerves more conſideration, in as much as it affirms that there were actually inſtances of the plague obſerved in Marſeilles before the 25th of May. In ſupport of this, M. Deidier informs us, that he had been at pains to make enquiry, and produces five caſes which he had diſcovered, and which he conſiders as undoubtedly peſtilential[9]. In the paſſage laſt referred to, three caſes only are mentioned, the two others are found in another place[10]. The purpoſe for which theſe caſes are intended, juſtifies an inference of their being the moſt clear and unequivocal in his power to collect; and I ſhall curſorily remark on each ſeparately. Mademoiſelle Augier died the 19th or 20th of April. A parotis had appeared the 13th, but it is not mentioned how long ſhe had been diſordered before its eruption, nor is there any mention whatever made of the concomitant ſymptoms. Mademoiſelle Conſtan, aged 28, had a carbuncle, accompanied with fever, which had very near proved mortal between the 3d and 4th of May. This is the entire narrative; no mention when ſhe was taken ill, nor how treated. Mademoiſelle Bote was ſeized with a violent fever the 20th of May. She had a gentle ſweat on the ſecond and third day, which was encouraged by a ſlight diaphoretic. On the 5th ſhe was free from fever, and a bubo the ſize of an egg was diſcovered in the groin; this coming to ſuppuration was opened, and ſhe recovered.

Theſe three caſes M. Deidier thinks fully ſufficient to prove the exiſtence of the plague before the 25th of May. I ſhall add, however, the other two, that the whole of the evidence may appear together. Mademoiſelle Carwin was taken ill the 16th of April; a parotis appeared the 28th or 29th of that month, but diſappeared on the third day, and ſhe died the day following, that is about the 17th of the diſeaſe. No ſymptoms are deſcribed, and the treatment is entirely omitted. M. André complained firſt

[9] Traité de la Peſte, p. 527.

[10] Ib. p. 204.

on

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on the ſecond of June of loſs of appetite, and a carbuncle on the thigh. A pledget of baſilicon being applied and covered with a gum plaſter, the tumor became very painful in the night. On the third day a fever came on, attended with head-ach, dryneſs of the tongue, wildneſs in the eyes, and a ſwelling in the fold of the thigh. The tumor opened and was cured in twenty-five days. No internal medicines are mentioned here, no ſcarification of the carbuncle, nor one peſtilential ſymptom, the wildneſs of the eyes excepted, and of this circumſtance, it is highly probable the apothecary was reminded by M. Deidier.

This is the whole of the evidence produced for a fact in contradiction to the united voice of the phyſicians of the city [11]. M. Deidier ſaw not the caſes himſelf, yet from the very imperfect accounts he had been able to glean, he thought himſelf juſtified in declaring they bore all the marks of the true plague [12].

Nothing but extreme partiality to an hypotheſis could have led any one, practiſed in the plague, into ſuch a declaration; the caſes bearing every internal mark of belonging to a different claſs from the plague: I ſhall endeavour to ſhow this in a few words.

Of the five ſuppoſed infected patients, three recovered, two died, and all had eruptions, One who died had a parotis (the moſt ambiguous of all the peſtilential tumors) without any concurrence, ſo far as appears, of peſtilential ſymptoms. The tumor had appeared ſix days before the woman's death, but how long ſhe had been ſick remains unknown. The other died the 16th or 17th day, a very unuſual period in the plague. She alſo had a parotis, which did not make its appearance till the 10th or 11th day of the diſeaſe. No peſtilential ſymptoms whatever are mentioned. Of the three who recovered, one was very ill with a

[11] Relat. Hiſtor. p. 427.

[12] Traité de la Peſte, p. 204, 527.

fever and carbuncle, but neither the invaſion nor duration of the diſeaſe are mentioned. Another had a carbuncle and a ſmall tumor in the thigh; and the third (which bears the neareſt reſemblance to a very ſlight infection) had alſo a bubo in the thigh; but the tumors in neither of thoſe patients are deſcribed in ſuch a manner as diſcriminates them from ordinary tumors, and the apothecary, who gives the account from memory, had in all likelihood never ſeen a peſtilential bubo before.

Of the perſons infected for ſome time after the arrival of the ſhips from the Levant, none had eruptions, and all periſhed after a few days illneſs; which agrees entirely with what was obſerved at Aleppo in the beginning of the plague: hardly any of the ſick recovered, and the major part died, in three or four days, without any appearance of buboes.

Upon the whole therefore, I think it very clearly eſtabliſhed, that the plague did not exiſt in France before the month of May, 1720[13].

The ſecond point, namely, that it was brought to Marſeilles in infected goods from the Levant, having been moſt of all diſputed, requires a fuller diſcuſſion.

"Captain Chataud's veſſel, ſuppoſed to have brought the in-
"fected goods, arrived with a clean patent, or bill of health,
"having left the coaſt of Syria before the plague broke out there,
"ſhe conſequently cannot reaſonably be thought to have tranſ-
"ported the plague, which was not in the ports from whence ſhe
"came[14].

[13] Prior to M. Deidier, I find a M. Pons had endeavoured to prove that the plague was in Marſeilles not only before the month of May, 1720, but even in the preceding year. See Relat. Hiſt. p. 411. I have not had an opportunity of ſeeing that gentleman's book.

[14] Traité de la Peſte, p. 165.

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In anſwer to this it ſhould be obſerved, that though Chataud's veſſel brought a clean patent from the coaſt, the plague broke out there ſoon after her departure; that the diſeaſe generally lies lurking ſome time in the place before it occaſions alarm, but was rife in the maritime towns of Paleſtine and Syria from the month of March; and that three veſſels, with foul patents, arrived at Marſeilles a few days after the arrival of Captain Chataud[15]: to this may be further added, that notwithſtanding his clean patent, perſons acquainted with the Levant will think it far from improbable that the plague might actually have been in Sidon when he ſailed, though unknown to the magiſtrate by whom the patents are granted. In order to explain this, it will be neceſſary to enter into a detail of matters not generally underſtood in England.

The diſcovery of the plague in any of the trading towns of Turkey, where Europeans are eſtabliſhed, produces ſuch a ſtagnation of commerce, that the natives, more eſpecially thoſe connected with the European trade, uſe every poſſible means of concealment. The uſual courſe of the diſeaſe in Syria favours this deception, for accidents in the beginning, or the reſuſcitation of a plague early in the ſpring, are always few, and often happen among the lower claſſes, of whom the Franks have little opportunity of knowing any thing, except through thoſe very dependants who are tempted by intereſt to deceive them. Should rumours of ſudden death chance to get abroad, they are variouſly and contradictorily repreſented; and tumors or other marks on the body, are ſometimes fraudulently concealed. But in the winter, or early in the ſpring, the characteriſtic eruptions are often abſent, and perſons employed near the ſick often eſcape infection, which renders it difficult to decide poſitively on the nature of the diſeaſe. This concurrence of circumſtances, which I repreſent from repeated experience, renders it no eaſy matter for the magiſtrate, however vigilant, to procure exact information.

[15] Journal, p. 2.

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In the regulations of the French and Engliſh, in regard to patents, or bills of health, there is a material difference. The French diſtinguiſh three kinds of patents[16]; clean, ſuſpicious or touched, and foul. The Engliſh admit the firſt only, for their ſhips cannot be diſpatched to England with either of the other two. The French ſhips may be diſpatched with any one of the three patents, the quarantine of Marſeilles being regulated accordingly.

The French Conſul at Aleppo, in the ſame manner as the Engliſh, is prohibited from having any concern whatever in commerce; in the inferior ſea ports on the coaſt, the Conſuls or Vice Conſuls are permitted to trade.

As the ſtate of the place in reſpect to health, whatever that may happen to be, proves no impediment in the diſpatch of the French ſhips, the patent is ſuppoſed to comprehend a diſtinct detail of circumſtances, to the beſt of the magiſtrate's knowledge; and it is the buſineſs of the council of health at Marſeilles, in regulating the ſhip's quarantine, to claſs the patent brought by her as it ſhall to them appear expedient. A clean bill of health imports that the place has been free from plague, and all ſuſpicion of plague, for a certain ſpace of time; but the clean patents of the firſt two ſhips arriving from the Levant, after the ceſſation of the plague, are, according to Mr. Howard, deemed foul at Marſeilles, and the paſſengers are obliged to perform a quarantine of thirty-one days.

The French Conſuls lying under an obligation to inſert in their patents a detail of circumſtances, it muſt appear ſtrange, when the condition of Syria at that time is conſidered, how Captain Chataud ſhould have obtained a clean patent.

[16] Memoire ſur le Bureau de la Santé de Marſeilles, &c. p. 40. Marſeilles, 1753, 4to.

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In the preceding year, 1719, the plague had raged at Aleppo with dreadful violence. The Europeans ſhut up the middle of March, and remained in confinement four months. Some writers aſſert that ninety thouſand ſouls were carried off in half a year; but the number, moſt probably, is exaggerated.

I conſider Doctor Ruſſel's account in all reſpects more to be depended on, who ſays, "the plague, in the year 1719, made "terrible havock at Aleppo. It advanced with ſuch rapidity in "the ſpring, that the Europeans ſhut up about the middle of "March, and remained in confinement till the middle of July. "I have been told it came from the northward; but none of the "letters or journals I have peruſed make mention of that cir-"cumſtance, though all of them confirm its raging at Tripoly, "Sidon, and other places in that neighbourhood, ſome months "before it appeared at Aleppo.[17]"

Whether the plague be ſuppoſed to have invaded the coaſt, before its coming to Aleppo, which ſeems highly probable, or to have broke out there for the firſt time in the ſpring of 1720, its having raged at Aleppo rendered the times highly ſuſpicious; for there is no example on record of the plague having ever viſited that city, without the maritime towns being ſooner or later affected alſo.

If the coaſt of Syria was free in the year 1719, there was ſtill more reaſon to expect a viſit in the following ſpring. From the numbers who fly thither from Aleppo in times of public calamity, either in hopes of refuge, or of meeting with opportunities of paſſing over to Cyprus or Egypt, danger at ſuch times is conſtantly apprehended: not to mention what ariſes from the internal commerce of the natives, which is never wholly interrupted. If the plague had raged on the coaſt in 1719, and, as

[17] Diſtinct Notions of the Plague, p. 106.

uſual,

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uſual, either declined in the autumn, or in appearance ceaſed in the winter, there was always ground for apprehenſion, till the ſpring ſeaſon of 1720 ſhould be well advanced.

The French Conſuls on the Coaſt could not poſſibly be ignorant of the circumſtances now recited; it muſt therefore appear ſurpriſing how they could grant patents expreſſive of no ſuſpicion. Neither could the council of health at Marſeilles be ignorant of what had happened in Syria in the preceding year; and they had received intelligence of the actual ſtate of the coaſt a month before the arrival of the ſuſpected ſhip. The facility with which the patents ſeem to have been iſſued in Turkey, and the partial indulgence of the council to Chataud's ſhip, notwithſtanding the very extraordinary mortality which had avowedly happened on the voyage, together with their eaſy confidence afterwards in the reports of the ſurgeon of the Lazaretto, can only be accounted for from the prevailing influence of private commercial intereſt, over the ſenſe of official duty.

Having ſhown what weight is due to the objection ſtarted by M. Deidier, and which has ſo often been triumphantly repeated by ſubſequent writers, "that it was impoſſible infection could "have been brought in a ſhip, from a port where the plague "had not broke out before the ſhip took her departure,[18]" I ſhall proceed to make ſome remarks on the accidents that happened during the courſe of Captain Chataud's voyage.

The journal extracted from the regiſter of the council at Marſeilles, and publiſhed by authority, ſays, "that Chataud's "ſhip arrived the 25th of May from Sidon, Tripoly in Syria "and Cyprus. That his patent was clean, having left the coaſt "of Syria the 31ſt of January, before the plague broke out "there: that he had loſt ſix of the crew, in his voyage, or at Leg-"horn, where he touched, but he ſhews by the certificate of

[18] Traité de la Peſte, p. 165.

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" the phyſicians of health at Leghorn, that they died only of " malignant fevers, cauſed by unwholſome proviſions[19]."

This account is not near ſo circumſtancial as what is given in the Relation Hiſtorique, and the Traité de la Peſte; and in the latter it is aſſerted, that *the malignant fevers produced by unwholſome proviſions*, was an interpolation made at Marſeilles[20]. At any rate the certificate from Leghorn could affect only the three ſailors who died there, not the others whom the phyſicians had not ſeen: and the indirect manner in which the Journal would ſeem to apply the opinion of the phyſicians to all the accidents, renders the certificate ſuſpicious.

According to the Relation Hiſtorique, and the Memoir to Monſieur Dodart, Captain Chataud's veſſel left Sidon the 31ſt of January, with a clean patent. The plague diſcovered itſelf there a few days after his departure. Having ſuſtained ſome damage from bad weather, he put into Tripoly, where he repaired his veſſel, and embarked ſome merchandiſe: he took in alſo certain Turks, paſſengers for Cyprus, together with their luggage. Soon after the ſhip had left Tripoly, one of theſe paſſengers fell ill, and died. Two of the ſailors employed to throw the corpſe overboard deſiſted at the deſire of the pilot, and the reſt of the ceremony was performed by the other Mohammedan paſſengers. The ropes, with which the body was lowered down, being by way of precaution committed to the ſea. Within a few days the two ſailors who had handled the corpſe were taken ſick, and died. At Cyprus the ſhip put her remaining paſſengers on ſhore, and made a very ſhort ſtay. Soon after her departure from that iſland, a third ſailor and the ſurgeon died of an illneſs of a few days duration. The captain, juſtly alarmed by theſe accidents, ordered the bedding and other things uſed by the deceaſed to be thrown into the ſea; and kept himſelf carefully ſeparate from the crew,

[19] Journal, p. 2.

[20] Traité de la Peſte, p. 5.

during

during the remainder of the voyage. Some time after this, three more ſailors fell ſick, and there being no ſurgeon on board, the veſſel put into Leghorn; where the three ſick men died, and the phyſician and ſurgeon of the Lazaretto declared the diſeaſe to be a malignant peſtilential fever[21]. CHAP. II.

It is unneceſſary to make any comment on this narrative, as clearer evidence of a veſſel being infected can hardly be expected; and either the captain muſt have been guilty of moſt criminal reſervation, or the council of Marſeilles of moſt unjuſtifiable neglect, in the not uſing ſtricter precaution at the beginning[22].

In regard to general arguments againſt the poſſibility of the plague being tranſported in merchandiſe, I wave them entirely, at leaſt for the preſent, for if there be ſufficient evidence of its having been in that manner conveyed to Marſeilles, ſpeculative reaſonings on the poſſibility of contagion, per fomitem, degenerate into ſcholaſtic diſputation.

Under the third article of facts eſtabliſhed by the French Memoirs relative to the beginning of the plague at Marſeilles, it has been ſhown that the infection was firſt communicated to ſome perſons on board of Captain Chataud's veſſel; afterwards, to ſome porters employed in opening and airing part of the cargo in the Lazaretto; and about the ſame time, to the city, moſt probably by contraband goods, or other things ſurreptitiouſly conveyed into it[23].

The objections to this regard the diſeaſe while in the Lazaretto, and after it was diſcovered in the town.

[21] Relation Hiſtorique, p. 29. Traité de la Peſte, p. 3. There is ſome variation in circumſtances in theſe two narratives, but they agree in the main facts.

[22] See on this head, Traité de la Peſte, p. 5. and p. ii. p. 188.

[23] Traité de la Peſte, p. 135, 136.

In

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In reſpect to the firſt, I do not find in any of the French Memoirs in the Traité de la Peſte, that the diſeaſe of which the porters in the Lazaretto died, is denied to have been the true plague; the accidents were ſo circumſtanced as not to admit of contradiction: but ſome Engliſh writers have endeavoured to render it doubtful, by allowing great weight to the declaration of the phyſicians and ſurgeon, who had not hitherto diſcovered what they conſidered as certain marks of the plague. "We "find here a ſickneſs, but it is a malignant fever: but had this "ſickneſs been the plague, it could not be ſaid to be brought by "the goods of Chataud's ſhip[24]."

This writer, with the Journal before him, which he profeſſes to follow, having mentioned the death of the ſailor on the 27th of May, paſſes over the whole of the ſubſequent deaths of the porters in the Lazaretto, as alſo the circumſtance of the ſurgeon, upon the diſcovery of buboes, at length retracting his former miſtake.

Secondly, The author allows "the matter of fact related in "the Journal to be the moſt proper to determine any queſtion "about peſtilential contagion; not only in France, but every "where - - - it ſets every thing in its proper light[25]. The firſt "ſhip, (continues he) that arrived with a foul patent, was that "of Captain Gabriel, the 13th of June: another ſhip with a foul "patent arrives the 28th from Sidon. Both theſe ſhips are "very fatal to the doctrine of the plague being contagious; for "there is not one ſick perſon aboard either of them, nor does "any cuſtom-houſe officer, or any officer of health, catch any "diſtemper from the companies or goods of theſe ſhips: ſo that "if any inference in favour of contagion is to be drawn from the "hiſtory of theſe ſhips, we find theſe goods moſt dangerous "where there is no ſuſpicion of the plague, and the ſhips and

[24] Diſtinct Notions, &c. p. 115.
[25] Ibid. p. 116, 118.

"cargoes

" cargoes arriving from infected parts, bring no peſtilential in- CHAP. II.
" fection along with them[26]."

Now let us ſee in what manner the hiſtory of theſe two ſhips comes to be ſo fatal to the doctrine of peſtilential contagion; keeping ſtrictly to the Journal, which is allowed " to ſet every " thing in its proper light." The goods of Captain Gabriel's ſhip, which arrived the 12th of June, were received into the Lazaretto. She had loſt no men in the paſſage, nor were any perſons on board taken ſick after her arrival in the port; but on the 23d of June, one of the porters employed in airing her goods was taken ſick, and died in three or four days; in conſequence of which, ſhe, together with the other veſſels at Pomegue, was ordered to the iſland of Jarre, and more rigorous reſtraints were impoſed on thoſe working on the goods in the Lazaretto. The whole of this is ſuppreſſed. The goods of the ſhip that arrived on the 28th of June were not received into the Lazaretto, and the Journal makes no mention of her after her arrival; ſo that her hiſtory is very imperfect. Thus of the two ſhips, the hiſtory of which was to overſet the doctrine of contagion, one furniſhes a proof of her cargo being infected, and of the other we know no more than that her cargo was landed on the iſland of Jarre; had ſhe loſt any men on the voyage, the Journal would moſt probably have mentioned it; but what happened afterwards remains unknown.

The author forbears drawing any conſequences from the healthful ſtate of the three veſſels which arrived the laſt of May, on account of no particular mention being made of their certificates. The Journal, however, mentions that two of them came from Sidon after the appearance of the plague there, which implied their patents to be foul. But there was a better reaſon for the author's forbearance; a porter employed in purifying the goods of one of theſe ſhips was infected the 24th of June, which

[26] Diſtinct Notions, &c. p. 118. Journal, p. 3.

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being unfavourable to the hypotheſis, muſt have been ſuppreſſed in the ſame manner as the accident from Captain Gabriel's cargo. It is difficult to conceive how two ſuch capital miſtakes ſhould happen through mere inadvertence, but the author, in the heat of controverſy, found himſelf reduced to the neceſſity of giving a partial repreſentation of facts, in ſupport of the ſtrange concluſion he wiſhed to draw from the Journal.[27] Chataud's veſſel is ſaid not to have been ſuſpected, though ſhe had loſt ſix or ſeven of the crew on the voyage; and a ſhip with a foul patent is declared to bring no infection, though a porter in airing her cargo is ſtruck with the plague.

Another writer, who appeared nearly about the ſame time with the anonymous author of the Diſtinct Notions, and a profeſſed adverſary to the doctrine of contagion, had obſerved, "if "perſons, who firſt unpack the goods coming from infected "places in the Lazarettos abroad, are never injured thereby; "and I cannot hear of any inſtance that they ever have; it may "be inferred either that goods do never receive the infection, "or that they do not retain it." To this a pamphlet, which appeared in vindication of Doctor Mead, very properly replied, "that the Journal of what paſſed at Marſeilles afforded ſeveral "undeniable inſtances[28]."

So direct a reference one might naturally think would have led Doctor Pye to a more careful peruſal of the Journal; and, as he was pleaſed to reply to the remarker, that he would have particularly endeavoured to invalidate the inſtances referred to. The method he took furniſhes a very good ſpecimen of his mode of reaſoning.

[27] Pye's Diſcourſe of the Plague, p. 44.

[28] Some Remarks on three Treatiſes, p. 63.

"To leave no room for objection, ſays Doctor Pye, I ſhall take "notice, that a guard of quarantine died on board (Chataud's "ſhip) the 12th of June; but as this officer was no ways con- "cerned either in unloading or opening the goods, he could "receive no hurt from them; and beſides, this muſt have been "fourteen or fifteen days after the goods had been carried out "of the ſhip into the Lazaretto. Farther, ſix of their men "are ſaid to die at Leghorn; but the town of Leghorn was not "infected from hence, which would have been more likely, if "there had been any infection in the caſe, than that Marſeilles "ſhould afterwards be infected[29]."

The death of the quarantine officer was mentioned in order to leave no room for objection; but it ſtill may be objected that he has omitted the death of the ſailor on the 27th of May, and aſſerted, in contradiction to the Journal, that the former ſix ſailors died at Leghorn.

That Leghorn was more likely to be infected than Marſeilles, is a ſtrange notion. The ſhip had landed no goods there, nor had any intercourſe with the ſhore; for the phyſician who viſits the ſick on board, remains at a diſtance from the ſhip, in a boat; and the dead bodies are ſunk in the ſea. As to the circumſtance of the goods of Chataud's veſſel being all in the Lazaretto before the 12th of June, it is a ſuppoſition to be aſcribed to Doctor Pye's unacquaintance with matters of that kind; for it is impoſſible a ſhip which arrived the 25th of May, ſhould diſcharge the whole of her cargo, of which part was cotton, in two or three days. The deſpatch would have been miraculous, conſider-

[29] The Remarks lately publiſhed on three Treatiſes, and with ſome additional notes, Lond. 1722.

There is no author's name to the book, but I have given it to Doctor Pye, on the authority of a manuſcript note, which I found in my copy.

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ing the ſhip lay near two leagues from the Lazaretto, and was unloaded, and the boats navigated, by her own crew.

It did not occur to Doctor Pye that ſome time, previouſly to the ſhip's beginning to unload, is taken up in examination and other forms at Pomegue, and the council of health. The loſs of ſix men on the voyage, was an extraordinary circumſtance that required deliberation; and it appears, that on the 29th, after the death of the ſailor on board Chataud's veſſel, the council determined the quarantine of his cargo to be forty days, commencing from the landing of the laſt bale[30]: which was double the time uſually allotted for a ſhip with a clean patent. It is very probable therefore, that the ſhip did not begin to unload till after the 29th of May, and poſſibly had not finiſhed when the quarantine officer died the 12th of June, who muſt have been taken ill two or three days before.

It may be proper to remark here, that paſſengers with their baggage are landed at the Lazaretto in a day or two after the ſhip's arrival; and accordingly it appears, that Chataud's paſſengers were admitted into the town the 14th of June. Doctor Pye obſerves, that "from them nothing could be apprehended, "as they had undergone a ſtrict purification." But neither their quarantine, nor that of the paſſengers of the other ſhips, was ſo long as uſual under circumſtances of ſuſpicion; and the baggage of the paſſengers is more to be dreaded than their perſons.

The poſition Doctor Pye undertakes to eſtabliſh is, "that the "porters who died in the Lazaretto of Marſeilles received no hurt "or infection from the goods;" and this he demonſtrates in the following manner. "If any infection or infectious *aura* can "be ſuppoſed to be packed up, and brought in goods; ſuch

[30] Journal, p. 2.

"in-

" infection or infectious aura muſt neceſſarily iſſue forth from
" them in greateſt abundance, and with greateſt force, at the firſt
" unpacking or opening of them; and as it muſt continue to
" fly off every moment, and be thereby continually diminiſhing,
" it is likewiſe certain that in a very few days the goods muſt
" be in great meaſure, if not intirely, cleared of it. Wherefore
" if the porters could have been infected from the goods at all,
" it muſt have been at the firſt opening of them: but even ac-
" cording to this Journal, the porters that firſt fell ſick were not
" taken ill before the 23d of June, whereas Chataud's ſhip ar-
" rived the 25th of May preceding; ſo that the goods of that
" ſhip, in purifying which the porter firſt mentioned was em-
" ployed, had been airing and purifying for 26 or 28 days before
" this accident happened; and it cannot be conceived that after
" ſo long a time they ſhould not have been entirely purged of all
" infection, or infectious aura, if any could have been brought
" with them. Or if it can be ſuppoſed, which I think impoſ-
" ſible, that any part of it might ſtill be left, it muſt withal be
" ſuppoſed ſo much leſs than at firſt, as not to be capable of do-
" ing, thoſe porters eſpecially, the leaſt hurt: to ſuppoſe other-
" wiſe, would be to argue that the ſame man who ſome days
" before had *received* and born, a very great quantity and force
" without any injury, could then be killed by a quantity and
" force infinitely leſs[31]."

In regard to the time requiſite for the complete evaporation of the infectious *aura*; in what proportionate gradation its activity is impaired by ventilation; and the ſpecific quantity required to produce effect on the human body, they are matters which I apprehend will not readily be admitted to be clearly and certainly known. But, without entering into this, I ſhall advert only to the facts produced by the Doctor, and endeavour to ac-

[31] Pye's Remarks, p. 53.

commo-

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commodate them to his own hypotheſis of the evaporation of the infectious aura.

That the firſt porters were not taken ill before the 23d of June is very true, but that the goods had been airing and purifying for 26 or 28 days, has been ſhown above to be an error. The doctor alſo makes two other ſuppoſitions equally erroneous. The firſt, that the whole of the cotton contained in a number of bales is equally imbued with infectious aura; the ſecond, that all the bales of a ſhip's cargo are opened by the porters nearly about the ſame time. But as the cotton contained in theſe bales may not only have been collected from different villages at different times, but packed up under various circumſtances relative to the materials uſed for embalage, and the perſons employed in embaling, or ſteeving them; it may eaſily be conceived, how the cargo of a ſhip coming even from a place where the plague actually rages may be partially infected, or not infected at all. The warmeſt advocate for contagion never contended for every bale of a ſhip's cargo being equally infectious. As to the airing of the bales, it is a laborious and tedious proceſs. Where there is a conſiderable number, it takes up ſeveral days to open and arrange them; goods of different kinds muſt be diſpoſed ſeparately, accounts taken, and the cordage, &c. laid up with care where it may be found again. The laborious part of theſe operations is performed by the porters, who alſo tranſport the goods from the water ſide to the encloſure where they are to be aired: and as the days of quarantine do not begin to be reckoned till all the goods are landed, the porters for ſome days at the beginning are ſufficiently employed in receiving and arranging the cargo, that being the buſineſs requiring the firſt diſpatch. When theſe circumſtances are conſidered, it will appear no extravagant ſuppoſition, that ſome of the laſt opened bales of Chataud's cargo might ſtill retain enough of infectious aura to infect the porter the 23d of June.

To

To ſet this retardment, almoſt unavoidable in the opening of bales, in a ſtill clearer light, it ſhould be obſerved that by the regulations at Marſeilles, all ſuſpected goods are ſubject to what is termed *ſereines*. That is, a certain number of bales are taken out of the hold, and being opened at both ends are expoſed to the air for two, three, or ſix days, by way of trial, in order to ſee if any ſigns of infection ſhould appear among thoſe employed in handling or moving the merchandize. When theſe have been aired, more or leſs, according to circumſtances, another parcel is opened and expoſed to ventilation, in like manner: ſo that, according to the burden of the ſhip, there may be ſeveral of theſe ſereines, each of ſeveral days duration. In this manner, independent of accidental impediments from winds and weather in ſending the goods from the ſhip, it may be ſuppoſed, were it at all neceſſary to make the ſuppoſition, that the porters, not only on the 23d of June, but on the 7th and 8th of July, were infected upon opening ſome new bales. As to the porter infected by Gabriel's goods, Doctor Pye thinks it impoſſible, becauſe the ſhip had been twelve days arrived in port; and the goods muſt have been eight or nine days airing and purifying;[32] had he been acquainted with the practice of the ſereines in quarantine, he would have been at no loſs to make the accident agree exactly with his notion of the infectious aura. But the Doctor has another argument in reſerve which renders all theſe computations ſuperfluous; for "according to the report of mer-" chants, *Frenchmen are not ſubject to the plague in Turkey*, and it " cannot be conceived that ſo ſmall a quantity of infectious air " as can be packed up, and brought in a bale of goods, ſhould " deſtroy them in France, or in an air and climate diſtant and " different; when the whole atmoſphere of the ſame infectious " air is found not to injure them in the very infected places, and " wherein it is allowed to be bred and generated[33]."

[32] The Remarks, &c. p. 54.

[33] Ibid. p. 53.

The

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The plain matter of fact as it ſtands in the Journal is, that ſix porters employed in purifying ſuſpected merchandize from the Levant, died of the plague; and their death was followed by that of the ſurgeon who attended them, and part of his family. Doctor Pye's account and explanation of the matter has been ſtated in his own words. It was upon his declaring he had never heard of perſons who received injury from unpacking goods coming from infected places, that he was referred to this Journal; and I ſhall conclude with his preface to the refutation of the inſtances he had been referred to. "The facts related in this Journal, ſeemed "to me to make ſo clearly againſt the modern notion of con- "tagion, that if this writer (the remarker) had not mentioned "them as undeniable inſtances in his favour, I ſhould not have "thought there had been any perſons here in England ſo dull "of underſtanding, or ſo much blinded with prejudice, as to "ſtand in need of having thoſe facts put into a more obvious "light: but having this occaſion, I ſhall conſider them more "largely than otherwiſe I ſhould have done; and ſhew that "the porters who died in the Lazaretto at Marſeilles, received no "hurt or infection from the goods."

We have ſeen the Doctor's demonſtration of this poſition; and I conceived his own preface, mutatis mutandis, might ſerve very well for my concluding remark on this ſubject.

The ſecond concluſion drawn from the abſtract account of the progreſs of the plague was, that about the ſame time the diſeaſe appeared in the Lazaretto, it was communicated to the town, probably, by contraband goods.

M. Deidier was of a contrary opinion; and what he ſays on the ſubject has been repeatedly urged by ſome Engliſh writers, without recollecting that the Doctor did not come to Marſeilles till

the 20th of September, and, from any thing that appears, could lay no claim to better intelligence than the magiſtrates of health and the town phyſicians, who had reſided in the place from the beginning, and who unanimouſly concurred in an opinion oppoſite to that of M. Deidier.

The Author of diſtinct Notions of the Plague, ſays, Doctor Deidier tells us that none of theſe goods (Chataud's) had been carried aſhore, from which he, the author, concludes they could not carry the plague to Marſeilles, were they ſuppoſed even to be infected. The French has it literally. "Although the merchandiſe was never delivered in the city, it was ſuppoſed that "ſome ſmall parcels belonging to the mariners, being clandeſtinely diſperſed there, &c." The Author of Diſtinct Notions of the Plague, proceeds to give M. Deidier's own words. "Some fancied that the little bundles or ſmall parcels of goods, "being clandeſtinely ſtole into the town, diſperſed the plague "all through it." It was upon this *miſtaken notion* and prejudice (c'eſt ſur ce préjugé qu'on croit) "that they believed, that every "ſick perſon infected every thing he but touched; and eſpecially "the apparel he wore, and the bed he lay upon.[34]

Upon comparing this tranſlation with the original,[35] it will appear that the words *miſtaken notion*, which, as they ſtand in the Engliſh, ſeem to have reference to the clandeſtine introduction of bundles or ſmall parcels, do not exiſt in the French. The prejudice mentioned there, if I am not miſtaken, refers not to the ſmuggling of ſmall parcels belonging to the mariners, but to the popular prejudice that the plague was communicated by contagion; a prejudice, which, in the ſequel, was adopted by M. Deidier himſelf.[36]

[34] Diſtinct Notions, &c. p. 116.

[35] Traité de la Peſte, p. 482.

[36] Ibid. p. 356.

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M. Deidier, nor no man upon earth, could reaſonably affirm that no parcels were ſecretly conveyed into the town; it was a negative incapable of proof. He might be of opinion that the plague was not in that manner communicated to Marſeilles, but no where affirms that parcels were not ſmuggled. "Je n'ai ja- "mais pû me perſuader que cette peſte ne vînt que de quelques "perſonnes, ou de petites paquets de marchandiſes répanduës "furtivement dans Marſeilles."[37] This was his opinion; but in place of calling in queſtion whether ſuch parcels were really brought into the town, he has recourſe to another method; he ſhows the fact to be uneſſential, by endeavouring to prove the plague was in the city before the ſhip's arrival: how far he ſucceeded in this has been ſhown already in another place.[38]

The Author of Diſtinct Notions, however, draws the following concluſion from the tranſlated paſſage of M. Deidier's Letter. "So "as none of this merchandiſe was then brought into Marſeilles, "not ſo much as a ſmall bundle, as far as was ever known; we "have all poſſible reaſon to conclude, that the plague was not "brought into Marſeilles by the goods of Captain Chataud's ſhip, "which was the moſt ſuſpected."[39]

Doctor Pye obſerves, "That the peſtilence was begun in the "town, before the porters died in the Lazaretto; for the Journal "informs us, that the very next day after the ſurgeons had de- "clared it to be the plague in the Lazaretto, ſome perſons were "found and declared to have the plague in the town too; and "the reaſon why it was not declared ſooner was, that the ſur- "geon did not know the diſeaſe on account of the abſence of "eruptions." The Doctor, here, places the declaration of the

[37] Traité de la Peſte, p. 527.

[38] See before.

[39] Diſtinct Notions, &c. p. 116.

[40] See Traité de la Peſte, p. 8. on the Subject of Smuggling. Ibid. P. ii. p. 188.

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plague both in town and in the Lazaretto about the 8th of July; but the Journal might have informed him, that three porters died in the Lazaretto between the 24th and 26th of June, and though, for the very reaſon Doctor Pye aſſigns, the ſurgeon had not declared their diſeaſe to be the plague, the event ſhowed that he had from the beginning been miſtaken.

I keep all along to the Journal, becauſe I do not know whether the gentlemen who wrote in 1722 had an opportunity of ſeeing the Relation Hiſtorique. If we follow the account given there, the plague was certainly in the town the latter part of June; the firſt alarm being given about the 20th of that month, a few days after Chataud's paſſengers came out of the Lazaretto[41].

Two circumſtances are mentioned by Doctor Pye which might have had more weight, had he not betrayed ſuch inattention, or partiality, in the repreſentation of facts from the Journal to which he conſtantly refers. The firſt, that he was informed, by a perſon who had reſided part of the year 1719, and till July 1720, at Marſeilles, that the town had been alarmed for two months before the arrival of the ſhips, by the people dying in numbers, and very unaccountably; and that the diſeaſe appeared to be the ſame as proved to be ſo deſtructive afterwards. The ſecond, that he was credibly informed Doctor Mead had received a letter from M. Chirac, acquainting him the plague had been ſome time in the town of Marſeilles before the ſhips arrival, the 25th of May[42].

With reſpect to the firſt, it will be ſufficient to remark, that whether the perſon alluded to was a medical man or not, the phyſicians and hoſpital ſurgeons of Marſeilles, who muſt be ſuppoſed to have had, at leaſt, equal opportunities of information, knew nothing of this extraordinary mortality[43]; and that even M.

[41] Relation Hiſtor. p. 40.
[42] Pye's Remarks, p. 56.
[43] Relat. Hiſtorique, p. 427.

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Deidier who ſet himſelf profeſſedly to prove the exiſtence of the plague previous to the month of May; in the ſeveral inſtances he was able to collect, produces none of ſudden, or unaccountable death. With reſpect to the ſecond, it is little material whether Doctor Pye was rightly informed or not. It is notorious that M. Chirac, in a public Memorial tranſmitted to the phyſicians at Marſeilles, uſes all his rhetoric to perſuade them that the diſeaſe then raging was not the plague, but a malignant fever like what he himſelf had ſeen in the years 1709 and 1710: and what is more ſingular, this Memorial was poſterior to the report of M. Chicoyneau of the 18th of Auguſt, ſent to the regent[44]. If therefore ſuch a letter was written to Dr. Mead, it was only a proof of inconſiſtency in the Regent's phyſician[45].

I have

[44] Relat. Hiſtor. p. 120, 124.

[45] The opinion delivered by M. Chirac in the Memorial here referred to, was ſo exactly what the Montpelier phyſicians afterwards endeavoured to ſupport, and to which they laboured ſo aſſiduouſly to accommodate the whole of their obſervations, that I ſhall tranſcribe M. Chirac's words. "Tout bien conſideré après avoir lû & "examiné avec grande attention les diverſes relations qu'on a envoyées de Marſeille. "——J'ai jugé que cette maladie, quoique grande en elle-même, & très dangereuſe, "n'étoit qu'une *fiévre maligne très ordinaire* dans les conjonctures où elle eſt arrivée, "entierèment ſemblable a celles que j'ai vu regner en 1709 & 1710, revetuë des mêmes "accidents; que ce n'eſt point une peſte venuë du Levant, & portée dans le vaiſſeau, "qui en eſt arrivé dans le port de Marſeille; que ce n'eſt qu'une fiévre maligne cauſée "par la mauvaiſe nourritures du petit peuple de Marſeille, il n'en faut pas davan-"tage pour cauſer une maladie auſſi conſiderable." Relat. Hiſtor. p. 124.

The report ſent by M. Chicoyneau to the Regent, contains the following articles in which the town phyſicians and ſurgeons unanimouſly agree. "Que cette maladie "enlevoit ou faiſoit perir dans deux ou trois jours, quelque fois même dans deux ou "trois heures de tems, la plus grand partie de ceux qu'elle attaquoit. Que quand une "perſonne attaquée de ce mal dans une maiſon & famille en periſſoit, tout le reſte "en étoit bientôt infecté & ſubiſſoit le même ſort—Que cette maladie étoit uniforme "preſque dans tous les ſujects, de quelque condition qu'ils fuſſent, & caracteriſée "par les mêmes accidens, ſur-tout par les bubons, les charbons, les puſtules livides, "taches pourprées, &c." P. 115.

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I have perhaps taken very unneceſſary pains to point out ſo minutely the errors, or miſrepreſentations in point of fact which I think imputable to the Author of the Diſtinct Notions of the Plague, and to Doctor Pye. But conſidering them as the principal adverſaries to the doctrine of contagion, who appeared at that period in England; and that their books contained various

The Montpelier phyſicians, after viſiting the hoſpital and private houſes, confirm the truth of this account. " Nous avons trouvé dans l'hopital, environ quatre à " cinq cens malades, dont plus de deux tiers étoient attaqués du même genre de mal " caracteriſé ci-deſſus avec bubons, puſtules livides, tâches pourprées, & les uns " mourans, & les autres prêts a mourir, quoiqu'ils n'euſſent été portés que depuis " quelques heures, ou ſeulement depuis un jour ou deux." P. 115.

Upon comparing this report with M. Chirac's deciſion, after he had maturely deliberated on the ſeveral accounts received from Marſeilles, I cannot avoid remarking, that either M. Chirac's notion of the true plague was very different from that of other phyſicians; or that prepoſſeſſion in favour of an hypotheſis rendered him blind to as clear a deſcription of the diſeaſe as it was in the power of words to convey.

It may alſo be remarked, that the Montpelier phyſicians do not at once declare, in the manner the phyſician and ſurgeon of the galleys had done at the beginning of Auguſt, the diſtemper to be the plague, they term it a *kind of plague* (une eſpèce de peſte) a true peſtilential fever (une veritable fiévre peſtilentielle) aſſigning a ſingular reaſon for this laſt denomination, namely, that ſome recovered from it; as if the true plague proved always mortal.

The caution with which theſe gentlemen qualify their declaration, confirms a remark made before, that they had come ready prepared with M. Chirac's ſyſtem; and, to do them juſtice, they ſpared no pains in their obſervations afterwards to ſupport it; whether out of reſpect to the Regent's phyſician, or from unwillingneſs to retract their firſt opinion. But if the diſeaſe was not the true plague on the 18th of Auguſt, it certainly never aſſumed that type afterwards, and ſtill leſs upon their return to Marſeilles in September; for it had then begun to decline, no new ſymptoms had ſupervened, and, as greater numbers recovered, it was on that account, agreeably to their own notion in Auguſt, more remote from the plague.—It ſhould however, be remarked here that the Journal, (p. 20.) which in this reſpect ought to be good authority, ſays, " The Montpelier phyſicians, in plain words, declared " it to be the plague."

That the Montpelier phyſicians came prepoſſeſſed with a theory, is further confirmed by the Relat. Hiſtorique, p. 352.

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arguments collected together, which are to be found diſperſed in numerous publications of thoſe times, I judged it better, by way of preliminary, to obviate their principal objections to certain facts which I conceive to be eſtabliſhed, before entering into the conſideration of the properties of contagion deduced from them. As to the declamation, and hypothetical reaſoning of thoſe gentlemen, I may refer to their own works, and to that of an anonymous writer who appeared in defence of Doctor Mead's ſhort Diſcourſe[45]; which, as I obſerved before, had, rather in an illiberal manner, been warmly attacked by both.

I ſhall conclude this chapter with a few paſſages from an eminent writer, who ſeems to think it probable that the Montpelier phyſicians ſent by the Regent, ſpoke on the introduction of the plague into Marſeilles from better information than that of thoſe of the city. "The fact of its being brought into "Marſeilles by infected goods, is poſitively aſſerted by the town "phyſicians, and as poſitively denied, upon a ſtricter examina- "tion, by thoſe ſent down by the Regent.—There never was "any plague better attended, nor better inquired into by phyſi- "cians than the laſt of Marſeilles, yet the facts (eſpecially thoſe "relating to its original cauſe) aſſerted by ſome of the town "phyſicians, are as poſitively denied by the phyſicians ſent "down by the Regent, and perhaps upon a more exact enquiry "and better evidence[46]."

I muſt beg leave to obſerve on the above paſſage, that no traces whatever are to be found of the more exact inquiry and ſtricter examination there alluded to. The report of the Montpelier phyſicians of the 18th of Auguſt, tranſmitted to the Regent, repreſents the aſſembly of phyſicians and ſurgeons convened by the ſheriffs at their requeſt, as concurring unanimouſly in opinion "non ſeulement ſur le caractere du mal, mais encore ſur les

[45] Remarks on the Treatiſes.

[46] Arbuthnot on Air, p. 175.

" cauſes que l'avoient produit. Que ce mal n'avoit commencé à " ſe faire ſentir qu'a l'arrivée d'un vaiſſeau venu de Seyde " dont quelques marchandiſes derobées avoient eté tranſportées " furtivement & ſans precaution, dans l'une des Ruës de la Ville, " qui à été infectée la premiere[47], &c." The circumſtances upon which this opinion was founded, were never contradicted. The Montpelier phyſicians admitted the facts, but endeavoured to account for them independent of contagion; and M. Deidier, in particular, found it neceſſary, as mentioned before, to attempt proving the plague to have been in Marſeilles antecedently to the month of May. Doctor Arbuthnot had not an opportunity of peruſing the collection of French Memoirs in the Traité de la Peſte, which I believe was not publiſhed till after his death; he otherwiſe would moſt probably have ſeen matters in a different light; for, ſuperior to the narrow prejudices in favour of a ſyſtem, he impartially repreſents things as they appeared to him on both ſides of the queſtion; and though he inclined to the opinion that the air was capable of producing the plague without infection, in a place where it is not an endemical diſeaſe[48]; he candidly acknowledges the evidence for its being produced alſo by contagion. " It is no leſs clear (ſays he) that the plague is alſo " brought into infected places by accident, and that it may, and " neceſſarily muſt, be ſpread by contagion. Marſeilles, by its " commerce with Egypt and Turkey, has been more frequently " infected with the plague than any city in Europe. There are " upon the records of that city, an account of twenty great " plagues. By the hiſtory of plagues, and particularly that laſt " of Marſeilles, the manner of ſpreading of the diſeaſe ſeems to " be gradual; at firſt ſeizing houſes, then ſtreets, quarters of " the town, and at laſt, like an univerſal conflagration, the " whole city[49]."

[47] Relat. Hiſtor. p. 117.

[48] Arbuthnot on Air, p. 180.

[49] Ibid. p. 188.

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The Plague at Marſeilles propagated by contagion—Thoſe who avoided improper communication, eſcaped the infection—Objections to theſe poſitions diſcuſſed.

THE fourth inference drawn from the Hiſtory of the Plague of Marſeilles, was "that the diſtemper was manifeſtly communicated from the ſick to the ſound by contagion.

It will be unneceſſary to beſtow much time in the illuſtration of this fact; the mere peruſal of the hiſtory itſelf, more eſpecially that of the progreſs of the plague from its commencement to the 21ſt of Auguſt, comprehending the firſt, and part of its ſecond period, according to the arrangement of the *Relation Hiſtorique*, will leave few doubts in the mind of an impartial reader.

The report tranſmitted to the Regent by M. Chicoyneau the 18th of Auguſt, repreſents the phyſicians and ſurgeons as unanimous in their declaration, "that when one perſon in a family "was attacked and died, the reſt ſoon underwent the ſame fate, "inſomuch that there were inſtances of families entirely de-"ſtroyed in that manner; and if any one of an infected family "fled to another houſe, the contagion accompanied him, and "proved fatal to the family where he had taken refuge[1]."

The firſt hoſpital opened for the infected, proved fatal to all the attendants[2]. The introduction of the plague into the Hotel Dieu, was traced to a woman received as a patient from the Rue de l'Eſcale, the ſtreet where the diſtemper firſt broke out. Two of the nurſes who aſſiſted at her reception, and the matron who

[1] Relat. p. 115. Journal, p. 19.
[2] Ibid. p. 103.

changed

changed her linen, were taken ill next day, and died after a few hours illneſs. From them the contagion ſpreading with dreadful rapidity, deſtroyed phyſicians, ſurgeons, apothecaries, confeſſors, and all the other officers and ſervants of the houſe, with the whole of the poor in the hoſpital, including above three hundred foundlings[3]. The prieſts and monks who attended the infected ſuffered in the ſame manner as the medical aſſiſtants, but many of them caught the infection by unguarded intercourſe before the diſtemper was publickly avowed[4]. Laſtly, of two hundred and thirty galley-ſlaves, employed in going into the infected houſes, and in burying the dead, two hundred and twenty periſhed in the ſpace of ten or twelve days[5]. It were ſuperfluous to collect a greater number of particular inſtances, where the whole tenor of the hiſtory concurs to eſtabliſh the fact in queſtion.

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But the progreſs of contagion is moſt eaſily traced in the beginning of a peſtilence, before the diſtemper has become ſo

[3] Relat. p. 108.

The like mortality happened in the Lazaretto of the Conſolation at Genoa, in 1667. "Quando poi nel meſe di Giugnio per la gran moltitudine che riempi "tutto il Lazaretto, reſto infetta l'aria allora anche li netti reſtarano da queſta pece "contaminati. Tre ſpeziali, loro aiutanti, monitionero con ſuoi figli, Cuoco, e Gar-"zoni di Cucina, Facchini, e Lavandaie di Caſa, in ſomma non ve ne reſto uno, "tutti furono paſto della gran beſtia; talche in un Lazaretto la diſtintione de' netti e "brutti, pare poſſa differire, ma non impedire la morte."

Antéro Maria, Lazaretti di Genoa, p. 458.

At length, in the month of June, when the air became infected from the multitude that crowded the Lazaretto, thoſe reckoned clean, without cloſe communication with the ſick, were mortally infected. Three apothecaries, their aſſiſtants, the houſe ſteward with his ſons, a cook, ſcullions, porters and waſher-women belonging to the houſe; in ſhort, not one remained, all falling victims to the devouring monſter: the diſtinction of clean and foul was loſt in the Lazaretto, or in reſpect to thoſe ranked in the firſt claſs, death was only retarded, not prevented.

[4] Relat. p. 188, 192, 196, 198, 211, 216. Journal, p. 42.

[5] Ibid. p. 234, 245. Journal, p. 22, 50.

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general as to render it impoſſible, in a promiſcuous intercourſe, to determine when or where the infection was contracted. The hiſtory of the two firſt months furniſhes marked inſtances of contagion; and the courſe of the diſeaſe in July and beginning of Auguſt, ſtands diſtinguiſhed from that of an incipient ordinary epidemic; which ſhows itſelf nearly at the ſame period in different quarters of a town, that have little or no intercourſe, and till towards the height of the epidemic, ſeldom more than one or two of the ſame family are found ſick. In ſome epidemical diſorders, as catarrhal fevers, numbers of the inhabitants in diſtant ſtreets are ſuddenly attacked at once. The plague commences not in this manner.

When M. Deidier contends that the ſpreading of the plague is no proof of its being contagious, but only of its being epidemical, it ſhould be recollected that he is to be underſtood as referring not to the beginning or firſt period of the plague at Marſeilles, which he had not ſeen, but to that advanced ſtage in September when it drew near its decline. At that time it certainly was epidemic; but without ſuppoſing a general infection of the air, the great number of ſick, and the multiplied fomites diſperſed every where, may account for the ſpread of the diſeaſe by contagion.

Another objection of that gentleman drawn from his own eſcape, and that of ſeveral other medical aſſiſtants who had courageouſly expoſed themſelves in the moſt dangerous ſituations, would have more weight, were it contended that all ought to be equally ſubject to infection, if the plague be ſuppoſed contagious. But when he talks of himſelf and his aſſiſtants eſcaping unhurt, he omits mentioning thoſe whom he had ſeen periſh in the exerciſe of the ſame offices about the ſick[6].

Again, when M. Deidier aſſerts, that if there exiſted an atmoſphere of infectious corpuſcles, it would be impoſſible for any

[6] See Traité de la Peſte, p. 282, 308, 487, 351.

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one, however robuſt, to eſcape from that of a peſtilential hoſpital; whereas he himſelf, as well as others, who daily paſſed ſeveral hours together in the hoſpital for ſeveral weeks, received no manner of injury; it ſhould be remembered, that many more in ſimilar ſituations periſhed[7]. The Hotel Dieu, formerly mentioned, furniſhes an example, and ſeveral others have already been cited. But it ſhould alſo be remarked, that the condition of the hoſpitals when the Montpelier phyſicians practiſed, was widely different from that of the Hotel Dieu and the temporary hoſpitals of the former period. Thoſe gentlemen arrived at Marſeilles about the 20th of September, in time to behold a part only of the horrid ſpectacle. Till then the utmoſt efforts of the magiſtrates, amidſt many other avocations, had with infinite difficulty effected the removal of heaps of corſes accumulated in the ſtreets. But, at that time, order had begun to be re-eſtabliſhed by the vigorous meaſures of M. de Langeron; the city was in a great meaſure cleanſed of its filth, and the wiſeſt ſteps taken to en-

[7] An Engliſh author who wrote in 1665, ſays, "I have ſeen ſome ſit at the doors "where the houſes have been ſhut up, and have heard them ſpeak (I cannot ſay "reaſon) as if there were no ſuch thing at all as that which people fear and call "infection, they ſay the ſcripture does not ſay the plague is infectious: why nei-"ther doth it ſay, that whoredome breeds the pox. They will tell you, they and "many more have been with the ſick and kept them company, and eat and drank, "and lay with them, and yet themſelves never ailed any thing: they may as well "argue that many have had the plague, blotches, blains, carbuncles, and the tockens, "and recovered, and therefore the ſickneſs is not mortal. When a philoſopher "came to a heathen idol's temple, one of the prieſts ſhowed him a table of the "names of ſuch perſons that in extremity of tempeſts and other dangers made vows "to the deity, and, eſcaping danger, came ſafe to land; but, quoth the philoſopher, "can you ſhew me how many made their vows and yet periſhed? And here a "queſtion may be aſked, how it comes to paſs that ſuch miſchievous perſons (as "wickedly diſſeminate the plague) eſcape themſelves? And whence it is that nurſes, "ſearchers, buriers, and ſuch as miniſter about the ſick, are free from infection? "To which I anſwer, that, perhaps, may not be always true, the pitcher indeed "goes often to the well, but at laſt may come home broken—ſurgeons, nurſes, &c. "have died." A brief Treatiſe of the Nature, &c. of the Peſtilence, by W. Kemp, M. A. Lond. 1665.

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courage the returning confidence of the people. The hoſpitals, however, could not be got ready before the fourth of October, that is about the beginning of the third period of the peſtilence, when, beſides the reſtoration of police, the diſeaſe itſelf was growing daily milder, and tending evidently to its decline[8].

The objection in ſhort of M. Deidier is reduced to this, "that "were the plague communicated by contagion, all thoſe that "expoſe themſelves muſt neceſſarily be infected." An argument which Aſtruc has very ſatisfactorily refuted[9].

M. Chicoyneau in like manner contends, that if the peſtilential leven was a real poiſon, it muſt conſtantly, like corroſive ſublimate, produce the ſame effect on all conſtitutions; but being poiſonous only in regard to the prediſpoſition of the ſubject it

[8] Relation Hiſtorique, p. 201, 299, 303, 308.

[9] Traité de la Peſte, p. 137.

A profeſſed aſtrologer, in 1665, obſerves, "That if the peſtilence be infectious "and really catching in itſelf, it muſt be ſo equally to all perſons that approach it, "or that it approacheth; or elſe it muſt be infectious to ſome particular perſons "only. If it be infectious to all perſons, or catching to all alike; then all perſons "that come into the ſight, or within the ſcent of it, muſt neceſſarily be ſubject "unto it. If not infectious unto all, but unto ſome particular perſons only; I ſay "then it ought not to be deemed or eſteemed infectious at all; at leaſt, not any "more infectious than are all other diſeaſes, viz. ſmall-pox, ſcurvy, pleuriſy, ague, "gout, &c. Since (though the notion of infection be laid aſide) there is not a "perſon born into the world that hath not at ſome time or other in his life (as his "nativity ſhall truly ſhew) ſome one diſeaſe or other. Never was any perſon ſub-"ject to violent diſeaſes, as plague, &c. but had a violent nativity to ſhew it, and "e contra." London's Deliverance predicted, p. 25, by J. Gadbury, Lond. 1665.

Had the Montpelier phyſicians adopted the principle of the aſtrologer, it would have ſaved them a world of pains. By the way as this book of Gadbury's was licenſed in the month of Auguſt, when the plague at London was increaſing faſt, it ſhows that the order of 1603, ſtrictly prohibiting all eccleſiaſticks and others from publiſhing an opinion that the plague was not infectious, or that it was a vain thing not to reſort to the infected, &c. &c. had become obſolete; for Gadbury expreſsly declares it is not contagious, and that it is madneſs to fly from it. Certain neceſſary Directions, &c. London, 1638. Orders by his Majeſty, (Jac. 1.) Art. 16.

attacks,

attacks, its effects will be more or leſs violent as the conſtitution happens to be differently diſpoſed: hence in the ſick of his fifth claſs, it operates very feebly, owing to the defect in the conſtitutional prediſpoſition [10]. He admits the great mortality of perſons employed about the infected, but thinks it may be accounted for independently of contagion [11]. The anſwer to all this has been anticipated; and the whole being hypothetical, unſupported by new facts, it will ſuffice at preſent to have barely mentioned his argument.

The fifth article of facts ſuppoſed to be eſtabliſhed by experience at Marſeilles, was, that thoſe who ſecluded themſelves from all communication with the ſick, or with perſons and goods which had been expoſed to infection, were not attacked by the diſeaſe.

In proof of this the Traité de la Peſte furniſhes ſeveral authentic certificates, from which I have ſelected two by way of ſpecimen. The firſt, given by the Biſhop of Marſeilles, "Certifions "& atteſtons à tous ceux qu'il appartiendra, que pendant la "déſolation de Marſeille en 1720 & 1721, la peſte n'a point "pénetrée dans les communautés religieuſes qui n'ont eu aucune "communication avec les perſonnes du dehors, & qui ont uſé "des précautions néceſſaires pour s'en garantir, & que le com-"munication ne fut plus à craindre dans cette ville en 1722, "par le ſoin que l'ont eu de renfermer exactement tous les ma-"lades dans l'hopital de la charité dès lors qu'il y'en avoit "quelqu'un." The ſecond is given by Le Chevalier Mouſtiez, firſt ſheriff of Marſeilles in the years 1720, 1721, and 1722. "Certifions que lors de la derniere contagion dont cette ville "fut attaquée pendant les ſudites années, il avoit été générale-"ment reconnu que la peſte ſe contractoit par la communication "des perſonnes, l'uſage & l'etat des étoffes de lain, cotton, &

[10] Traité de la Peſte, p. 305.

[11] Ibid. p. 326.

"autres

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" autres également ſuſceptibles de l'impreſſion du venin; etant " prouvé par l'experience que les familles qui s'etoient enfermées " & qui n'avoient point communiqué au dehors, ſingulierement " les monaſteres des filles, avoient été garanties de ce fleaux, " lequel ne s'étoit introduit chez quelques uns que par la com- " munication avec de perſonnes étrangeres[12]."

The next teſtimony I ſhall produce, is that of M. le Chevalier de Langeron, who was actively employed from the commencement to the termination of the plague, firſt as a commodore of the gallies, and afterwards from the 12th of September 1720, as governor of the town of Marſeilles and its dependencies. He acceded to his government in the midſt of univerſal deſolation; and to his wiſe and active adminiſtration, even the Montpelier phyſicians join in paying the higheſt encomia, though the ſucceſsful meaſures he purſued were directly oppoſite to the ſyſtem they had adopted. The paſſage I tranſcribe is from a letter to the miniſter of ſtate, in anſwer to an article of a Memoire of M. Chirac, who perſiſting in his firſt ideas, propoſes ſix articles for deliberation, moſt of which ſerve only to ſhow the prevalence of an hypotheſis over the cleareſt evidence[13]. " Il y'a encore " (ſays M. de Langeron) d'autres perſonnes qui peuvent penſer, " comme le mémoire; ce ſont gens qui ont imaginé un ſyſtême " nouveau ſur la peſte, & qui diſent contre l'experience de tous " les ſiécles, qu'elle ne ſe communique point. Quelque con- " fiance qu'ils méritent ſur tout autre choſe, il ſeroit dangereux " de les croire ſur celle-ci, puiſque ſelon eux, les précautions " qu'on prend pour éviter la communication, ſeroient inutiles " & que ce ſeroit expoſer tout un peuple à une perte certaine, ſi " l'on n'en prenoit point. Nous avons remarqué que ceux qui " ſe renfermoient ſains chez eux, en ſortoient ſains; il ne faut " pas d'autre preuve pour détruire leur opinion, & il eſt inutile " de s'étendre d'avantage là deſſus[14]."

[12] Traité de la Peſte, p. 150, 153.
[13] Ibid. p. ii. p. 130.
[14] Ibid. p. ii. p. 134.

Oppoſed

Oppoſed to theſe teſtimonies I find two paſſages in books of acknowledged authority, which merit conſideration. The Journal ſo often cited ſays, "and what is unaccountable, thoſe who have "ſhut themſelves up moſt ſecurely in their own houſes, and are "the moſt careful to take in nothing without the moſt exact "precautions, are attacked there by the plague, which creeps in "no one knows how[15]."

The above paſſage did not eſcape the author of Diſtinct Notions of the Plague, who produces it as an argument againſt contagion; and immediately ſubjoining another extract which recites the number of ſecular as well as regular clergy who had periſhed, adds, "and therefore it was very manifeſt, that the plague is "cauſed by the air, ſince theſe religious may be ſuppoſed as truly "ſecluded from the world, as human art or human fears could "contrive[16]."

From this manner of ſtating the caſe, one would think that all thoſe religious had been cloſe ſhut up, without any communication with perſons without doors, and this was certainly intended by the author; but it will be found upon looking into the Journal, in the beginning of the very paragraph cited, that the greateſt part of them are repreſented as martyrs who had meritoriouſly expoſed themſelves. "But theſe ſacred labourers are almoſt all "taken away by death, in the time of ſo great a mortality, when "their help is moſt wanted[17]. Of the twelve different orders mentioned on this occaſion, the grand Auguſtins only are ſaid to have kept in their convent.

But ſuppoſing the Auguſtin convent to have been actually ſhut up, and in that ſtate infected; it would by no means invalidate the inſtances brought of the preſervation of the convents, the

[15] Journal, p. 41.
[16] Diſtinct Notions, &c. p. 66.
[17] Journal, p. 42.

certi-

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certificates concerning which were granted deliberately after all was over; whereas the Journal written from day to day, marking tranſactions rapidly as they occurred, the author, amidſt various other affairs, had not always leiſure or opportunity to examine minutely into circumſtances. It is in this light I am inclined to conſider the houſes being infected which took in nothing without the moſt exact precautions; and the rather becauſe I met with ſeveral inſtances of the like kind at Aleppo, in houſes of the Chriſtian and Jewiſh natives; but in the ſequel it generally appeared there had been ſome improper communication carried on by the domeſtics, unknown to the family at the time.

The teſtimony of the *Relation Hiſtorique* is more explicit, "that in the height of the peſtilence the infection penetrated "into places which till then had remained inacceſſible; that mo- "naſteries and houſes ſhut up in the moſt exact manner, were "no longer places of ſecurity." This was aſcribed to the air itſelf being infected, by the peſtiferous effluvia ariſing from the numerous ſick, and the heaps of putrifying dead bodies, which every where filled the ſtreets[18].

That the atmoſphere, in a city ſo dreadfully circumſtanced as Marſeilles, may become ſo highly tainted as to convey the plague into houſes ſhut up, cannot conſiſtently be affirmed to be impoſſible, by thoſe who hold mediate contagion; and the concurrence of circumſtances at that period in Marſeilles, renders it highly probable ſuch accidents happened. But in general, the peſtiferous effluvia once emitted into the air, do not appear to operate at any great diſtance from their ſource; and M. Deidier aſſerts, that two monaſteries (from their ſituation, one near a burial ground, the other near a peſt-houſe) very dangerouſly ſituated, remained nevertheleſs untouched, which he thinks an argument againſt infection being conveyed by the air[19].

[18] Relation Hiſtorique, p. 169.

[19] Traité de la Peſte, p. 355. ſubjoined to the Diſcourſe of M. Deidier, is an account

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" Let it be conſidered, ſays Doctor Arbuthnot, to what a large " extent ſome bodies will affect the air; for example, the ſnuff " of a candle:—the perſpirable matter of leſs than 3000 human " creatures would make an atmoſphere 71 feet high, over an acre " of ground, in 34 days. This perſpirable fluid is to air in den- " ſity, perhaps as 800 to 1; therefore if you extend the 3000 " people over an hundred acres of ground, there will remain eight " inches, the greateſt part remaining unblown off, and ſpread " with the infinite tenuity of odorous effluvia, will infect the " whole air of that city." [20]

Ingenious calculations of the quantity of animal ſteams emitted in a given time, and of the ſpace they would occupy in the atmoſphere, when applied to peſtiferous effluvia, will perhaps be found more ſpecious than juſt. There is no neceſſity for ſuppoſing theſe effluvia of the ſame denſity with the perſpirable matter; and, beſides their being ſubject to ventilation, they may be variouſly modified, perhaps rendered innocuous even in a ſtagnant ſtate, by the admixture of air.

count of ſome religious infected in convents at Toulon, that were ſhut up; but as circumſtances ſtand in the narrative, nothing can be concluded in contradiction to the certificates from Marſeilles.

[20] Arbuthnot on Air, p. 189.

Suppoſe, " ſays Doctor Pye, that a ſound perſon ſtanding a minute at three or " four yards diſtance from the ſick, can have received a quantity of peſtilential mat- " ter ſufficient to produce the ſickneſs, it muſt be reckoned that twenty times as much " at leaſt had been emitted in the time as had been intercepted and received into " that perſon's body; ſo that within the ſpace of an hour, a ſick perſon muſt emit " enough of peſtilential matter to infect 1200 others; and, within the ſpace of 24 hours, " a quantity ſufficient to infect 28,800, &c." Diſcourſe of the Plague, p. 56.

To this it was replied, by the Remarker, " Theſe impertinent calculations con- " clude no more againſt a ſick perſon being infectious, than they would againſt a roſe " having a ſcent; for a roſe will have emitted matter enough for as many perſons to " have ſmelt, as here a ſick perſon is ſuppoſed capable of infecting, and was the " odour venemous and deadly, as is ſaid of ſome poiſons, as many perſons would be " killed by it." Remarks on three Treatiſes, p. 65.

But admitting the poſſibility of the air, at certain times, being replete with peſtiferous effluvia, and capable of conveying them in an active ſtate to ſome diſtance, the infection of houſes ſhut up, may be ſatisfactorily accounted for without recurrence to the ſuppoſition of miaſmata floating in the atmoſphere.

The people of Marſeilles, as it has almoſt invariably been obſerved in the beginning of a peſtilence, unwilling to give ear to a truth of dreadful conſequence, permitted themſelves to be deluded by various reports; they continued to flatter themſelves that the diſtemper was not the plague, after all rational doubt was over;[21] and ill judged police, on the part of the magiſtrates, favoured the popular deception.[22] The ſchools and college were ſhut early in Auguſt, but it was the 21ſt before orders were iſſued for ſhutting up the churches; and on the 16th of that month, the magiſtrates were reluctantly obliged to indulge the ſuperſtition of the populace, in making the annual proceſſion on the feſtival of St. Roch, which occaſioned a moſt dangerous concourſe.[23]

The plague thus diſſeminated before the people were properly alarmed, and the ſequeſtring themſelves in their houſes being long delayed, it may reaſonably be preſumed that many ſhut up with the infection lurking in their family; and public diſorder in-

[21] Relat. Hiſtor. p. 132. Journal, p. 7.

[22] Ibid. p. 12, 112.

[23] In the plague of Moſcow in 1771, the populace, who had been prohibited from paying the accuſtomary laſt duties to the dying and the dead, roſe tumultuouſly in a religious frenzy, and broke into the hoſpital, and other places where the infected were lodged; reſtored the religious ceremonies about the ſick; kiſſed their departing friends; and would not permit the bodies to be buried, as before, without the city. The inſurrection was quelled in a few days, but much miſchief was produced by this concourſe of a diſtracted people. "Tot hominum ſanorum, ægrotorumque con-" curſu, contagio aucto, mille & ducenti ultraque ſingulis diebus moriebantur." The inſurrection happened the 15th of September, in the firſt part of which month the mortality from 700 daily, roſe gradually to 1000. Merten's Obſerv. p. 84. Vindibon. 1778.

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creaſed ſo faſt, when once the popular apprehenſion aroſe, that whether thoſe of better rank ſequeſtered themſelves in town, or fled to their *Baſtides*, it became extremely difficult to procure even the neceſſaries of life.[24] Theſe circumſtances ſo unfavourable to the ſtrict maintainance of the precautions requiſite in ſhutting up, left it in the power proportionally of few, to protect themſelves in that manner. The infection may therefore, in many inſtances, have been contracted previouſly to confinement, or have pervaded through the neglect of regulations not eaſily preſerved inviolate, in the times of dearth and univerſal diſorder. I ſay this may be readily conceived, without ſuppoſing the air generally tainted: a ſuppoſition irreconcilable to the preſervation of the convents, as well as to the declaration of M. de Langeron, "that thoſe who "were found when they ſequeſtered themſelves, came out from "confinement in good health."

M. Deidier, indeed, deſcribes the inhabitants of Marſeilles, as univerſally ſhut up, when he arrived there the 20th of September, and urges it as an argument againſt the plague being ſpread by contagion. "Lorſque nous avons vu tomber juſqu'à cinq "cens malades par jour dans tous les différens quartiers de la ville, "chacun étoit renfermé dans ſa maiſon, & perſonne ne commu- "niquoit. Eſt-il vraiſemblable que tant de perſonnes diſperſées "euſſent communiqué avec des peſtiférés, ou porté des hardes "peſtiférées, avant que de s'enfermer? C'eſt pourtant ce qu'il fau- "droit néceſſairement ſuppoſer ſi le mal ne ſe prenoit que par "contagion."[25]

That every one was ſhut up in his houſe, and no one communicated with another, at a time when five hundred fell ſick daily, is a hazarded aſſertion, of the truth of which M. Deidier could not poſſibly be well aſſured. But ſuppoſing it for a moment to

[24] Relat. Hiſtor. p. 89, 135.

[25] Traité de la Peſte, p. 525.

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be ſtrictly true, were the people then taken ſick, the inhabitants of houſes which till that time had remained free? Was it in the nature of things, at a time when order only began to take place, that people ſhould be generally ſhut up in ſound houſes? or was it not more probable, conſidering the dreadful mortality which had preceded, that many of the then ſequeſtered families were in houſes which had already been viſited? The Hiſtorical Relation, and the Journal, may ſerve to illuſtrate theſe points.

That ſeveral perſons were attacked by the plague who had no ſuſpicious communication, is another aſſertion eaſily pronounced alſo; but, conſidering the condition of Marſeilles, it was no eaſy matter for any one, if not ſtrictly ſhut up, to be certain he had not inadvertently expoſed himſelf. The fact aſſumed by M. Deidier is almoſt of impoſſible proof, in reſpect to any perſon living at large in an infected city. He himſelf might ſay, that in viſiting the ſick he was daily expoſed to infection; but the moſt cautious man upon earth, if not ſequeſtered, could not declare with equal confidence, that he was ſure of having had no dangerous communication.

As the certificates relative to the preſervation of the convents at Marſeilles ſtand uncontradicted, the fact may be conſidered as admitted. But endeavours have been made to ſhow that their preſervation was owing to other cauſes, and not to the carefully avoiding communication. M. Deidier aſcribes it to their being ſupplied with good bread. "Ce n'eſt pas tant à mon avis, parce "qu'on s'y eſt garanti de la contagion en demeurant enfermés, que "parce qu'on s'y eſt toujours nourri d'excellent bled, comme je "m'en ſuis informé par moi même." The preſervation of the poor's-houſe (la charité) he aſcribes to the ſame cauſe.[26] This hoſpital it ſeems had uſed precaution, and remained exempt from the diſtemper in the height of the plague. About the end of Sep-

[26] Traité de la Peſte, p. 355, 528.

tember

tember it was found expedient to remove the poor to another place, and convert the *charité* into a peſtilential hoſpital.[27] Some, however, of the paupers, were retained to nurſe the infected; almoſt all of whom, according to M. Deidier, periſhed. " Ceux " de ces pauvres miſérables qui furent appliqués au ſervice des " peſtiférés ſuccomberent preſque tous, non par l'infection de l'air, " car il en ſeroit arrivé de même auparavant, mais par les mauvais " alimens, & par la mal propreté qui donnerent lieu a l'epide- " mie."[28] He had remarked before that, " L'hopital de la cha- " rité qui regorgeoit de monde jouit pourtant d'une parfaite ſanté " tant que la bonne nourriture dura;" from which one would be apt to think, that when no longer ſupplied with good proviſions it was attacked with the plague. But this appears not to have been the caſe; for the *charité* remained untouched at the time the poor were removed from it, and it was thoſe left behind to ſerve in the peſt-houſe who were afterwards infected. In aſcribing the preſervation of that hoſpital to wholeſome aliment, M. Deidier acts conſiſtently with the ſyſtem he had adopted of the cauſe of the diſtemper; but that he ſhould think the air of the wards, when the hoſpital came to be crowded with infected patients, exactly the ſame as before the hoſpital was converted into a peſt-houſe, is beyond my comprehenſion.

Another cauſe aſſigned for the convents remaining exempt from the plague, is the tranquillity of mind which the females derive from the imaginary ſecurity of their ſituation; the total abſence of terror and dread of infection. " Les monaſteres des filles doi- " vent être plus exempts de cette maladie, parce que les filles étant " enfermées, la reflexion qu'elles font ſur leur clôture, qu'elles " regardent alors comme un rempart aſſuré contre la communica- " tion de la peſte, leur procure une joie & une tranquillité d'eſprit " qui les met à l'abri de tous les déſordres de la crainte & de la " frayeur."[29]

[27] Journal, p. 60.
[28] Traite de la Peſte, p. 355.
[29] Ibid. p. 174.

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The extravagant effects aſcribed to fear in the production of the plague, have been more than once adverted to before, and have been very well expoſed by M. Deidier, in the refutation of Gerſtman's Syſtem in the Tumulus Peſtis: though he takes no notice of Meſſrs. Chicoyneau and Verny, whoſe notions, on that head, were pretty much the ſame with Gerſtman's.[30] Referring to that refutation, I ſhall only remark that the imaginary tranquillity in the nunneries, is the ſuppoſition of a perſon who had never experienced what it is to be ſhut up in times of peſtilence. The apprehenſion that ſome one may have caught the infection before the doors were ſhut; the reflection that the imprudence or neglect of ſome domeſtic may ſtill introduce it; the anxious attention to the regulations; the alarm produced by every incidental indiſpoſition; and the ſympathetic feelings of humanity for the diſtreſſes of others, are circumſtances incompatible with that unruffled ſtate of tranquillity and confidence, which are ſuppoſed to ſecure the conſtitution againſt infection.

CHAP. IV.

Decline of the Plague at Marſeilles—Certain Forms of the Diſeaſe, under the Advantages of regular medical Attendance, not leſs mortal than in the former Periods of Diſtreſs and Anarchy—Illiberality of the Montpelier Phyſicians—Decline of the Plague owing to a Change in the Conſtitution of the Air.

THE ſixth and laſt article of facts ſuppoſed to be eſtabliſhed by the Hiſtory of the Plague at Marſeilles was, that the plague, advancing rapidly in Auguſt, raged through that month and September; declined faſt through October and November; and in-

[30] Traité de la Peſte, p. 349. See alſo Relat. Hiſtor. p. 399.

ſtances

ſtances in the middle of winter were ſo rare, that it was ſometimes thought to have ceaſed. That it revived in the ſpring 1721, but did not ſpread; and vaniſhed entirely after the ſummer ſolſtice of that year. CHAP. IV.

The hiſtory of the increaſe and height of the peſtilence affords a variety of curious facts, ſome of which will be produced hereafter in illuſtration of the properties of contagion; for others I muſt refer to the hiſtory itſelf, and ſhall confine my remarks in this place to the decline of the diſtemper in October; its progreſs in the winter; its revival in March, and its final extinction in June or July 1721. At this laſt period the Relation Hiſtorique terminates; the Journal, ſo often cited, brings matters no further down than the 10th of December, 1720.

The decline of the plague in October, was almoſt as rapid as its increaſe had been in Auguſt. Perſons who had kept retired at home, began about the middle of the month to appear in the ſtreets, which were then become more paſſable; the dead bodies, filth, and ſtuff thrown out from infected houſes, that had ſo long rendered them horribly offenſive being removed. Towards the end of the month, the diſtemper ſeemed to ſtop ſhort, five or ſix days elapſing without any freſh accidents.[31]

At the time the plague viſibly declined in the quarters where it had raged in the autumn, it increaſed in that of St. Ferriol, one of the moſt open and well aired in the city, and inhabited chiefly by people of better rank. And notwithſtanding the medical attendance, and the advantage of every other convenience, the diſtemper in that quarter purſued its uſual progreſs.

The ſame forms of the diſeaſe, that proved ſo fatal in the former periods, ſtill proved fatal, though regularly treated by thoſe very

[31] Relat. Hiſtorique, p. 304, 308.

phyſicians

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phyſicians who with ſuch confidence had aſcribed the preceding mortality to the want of proper medical aſſiſtance, and the ſcarcity of the neceſſaries of life.

" Le mal ne ſe repand plus avec la même rapidité mais il exerce " toujours la même violence ; on voit toûjours des morts promptes, " mêmes ſymptomes, même malignité . . . . On meurt à preſent " avec des medecins, comme on mourroit auparavant ſans medi- " cins . . . . Quoique nous diſions que le mal exerçoit toûjours la " même violence, cela n'étoit pourtant pas general. Le plus grand " nombre de ceux qui furent attaqués dans ce troiſième periode " n'avoient qu'un mal très benin & très leger." [32]

In regard to the forms arranged under the firſt and ſecond claſſes of Meſſrs. Chicoyneau and Verny, they themſelves declare, that in the firſt they only had recourſe to cordial and ſudorific remedies, which proved of no ſervice, or at beſt ſerved only to keep back the fatal period a few hours ; and that it was very rare to ſee any of the ſick in the ſecond claſs eſcape, though they ſupported themſelves a little longer than thoſe of the firſt : [33] and this they acknowledge brought them at firſt to join in the generally received opinion of the malignity of the diſtemper being beyond the reach of medecine. But having met with ſome particular caſes wherein remedies were of ſervice, " there is room to preſume (continued they) " and we are but too much convinced of it by fatal experi- " ence, that the deſertion and inactivity of the greateſt part of the " people who might have given aſſiſtance, that the want of nou- " riſhment, of remedies and attendance, that the fatal prejudice " of being ſeized by an incurable diſtemper, that the deſpair, in " ſeeing one's ſelf abandoned without any relief ; we ſay, we " are well convinced that all theſe cauſes have no leſs contributed " than the violence of the diſeaſe, to the ſudden deſtruction of

[32] Relat. Hiſtor. p. 299, 303.

[33] Traité de la Peſte, p. 225, 226.

" ſo great a number of the ſick, not only of this claſs but of the " others; ſeeing that in proportion as this mortal fear of the " contagion is diminiſhed, and that one is mutually aſſiſted, that " the hopes and courage of the people are returned; that, in one " word, good order is re-eſtabliſhed, by the authority, firmneſs " and vigilance of the Chevalier de Langeron, &c. the progreſs " and violence of this terrible ſcourge has been obſerved to di- " miniſh inſenſibly, and we have been more ſucceſsful in curing " the infected."[34]

When theſe gentlemen affirm that the want of aliment, remedies, and attendance, together with the other cauſes above recited, contributed, not leſs than the virulence of the diſeaſe, to the ſudden deſtruction of ſo great a number of the ſick of the firſt as well as the other claſſes; might it not reaſonably have been expected that when aliment, remedies, &c. were ſufficiently ſupplied; when the miſtaken notion of incurability was baniſhed by the undaunted attendance of phyſicians, who aſſured their patients the diſeaſe was of all others the leaſt dangerous;[35] that one half, at leaſt, of the ſick of the firſt and ſecond claſſes would, under ſuch favourable circumſtances, have recovered? Yet, almoſt all periſhed; medicine only prolonged life a few hours, and ſometimes was ſuſpected of abridging it. Was then a ſeeming ſucceſs in an inconſiderable number of inſtances, ſufficient to juſtify ſo raſh, and, as it reſpected the Marſeilles phyſicians, ſo illiberal a declaration.[36]

It appeared, ſays the Hiſtorical Relation, " que dans le troi- " ſième periode, les malades traités par ces medecins ſi actifs, & " aſſiſtés de tous les ſecours; ne laiſſoient pas de mourir comme " auparavant:——que leur pratique n'étoit ni plus ſure ni leur " prognoſtic plus fidele que ceux des autres—qu'ils ne propoſoient

[34] Traité de la Peſte, p. 231.
[35] Journal, p. 56.
[36] Relat. Hiſtor. p. 378, 381.

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" d'autre remede, que ceux dont on avoit déjà reconnu la foibleſſe " & preſque l'inutilité : que bien loin de corriger le préjugé d'in- " curabilité du mal, ils n'avoient fait que le fortifier d'avantage " par le petit nombre de malades, qu'ils avoient gueris." [37]

The compliment paid by thoſe gentlemen to M. de Langeron and the ſheriffs, is very juſt. By a firm conduct and well concerted regulations, order had by them been reſtored to the city; but when they repreſent the decreaſe of the diſtemper, merely as a conſequence of the exertions of police, and add their own ſucceſs in curing the infected; it would have been better to have ſacrificed to medical truth, the tacit compliment paid to themſelves, and ſhown with more preciſion the cauſe of that decreaſe, as well as of their own better ſucceſs in practice.

The calm, at Marſeilles, towards the cloſe of October, was of ſhort duration; the diſeaſe again germinating in different quarters, particularly in that of St. Ferriol; but with abated force, both in reſpect to the violence of the diſeaſe, and the numbers infected. In the laſt fortnight of November, the newly infected, excluſive of thoſe carried to the hoſpital, did not exceed eight or ten in a week. [38]

In this ſtate, however, the diſtemper occaſioned freſh alarm, and its increaſe was aſcribed to the following cauſes. To people flying for refuge into the town, from the adjacent territory where the diſtemper then raged; [39] to the imprudent handling of goods in infected houſes, by perſons impatient to know the value of poſſeſſions to which they had unexpectedly ſucceeded; [40] and laſtly, to a rage for marriage, which ſpread epidemically, and often proved fatal to the new couple. [41] Theſe and other enormities excited

[37] Relat. Hiſtor. p. 382, 383. [38] P. 334. [39] P. 337. [40] P. 338.
[41] P. 340 and 343. See Lazaretti di Genoa, p. 123.

In

cited the attention of government, which at length interpoſed, but could not ſtop them entirely. CHAP. IV.

The cauſes now enumerated might, no doubt, have ſome effect, and the exertion of the magiſtrates might, in ſome meaſure, check theſe diſorders; but a more general and powerful cauſe had begun long before to reſtrain the havock of the peſtilence, which had declined viſibly in September, and, in the courſe of the three ſubſequent months, decreaſed with a rapidity not aſcribable to

In tanti terrori, e ſpaventi, tra tanti fetidi, e putrefatti carnami, fra tante ſtrida, ſoſpiri, e gemiti de' patienti, che avreſte creduto? che le perſone ſpaventate, & inhorridite ſteſſero ſempre melanconiche, modeſte, & pacate? Voi ſiete in errore. Si canta, ſi ſuona, ſi ſalta, ſi fanno gl'amori, ne mai ſi vidde Genoua tanto sfacciata, diſſoluta, e licencioſa——e gia ch'altrove diſſi che in queſta peſte Dio vendemmiava per il cielo, pareva ancora il tempo delle vendemmie per li sfrenati della terra. Che ſe ciò non è, d'onde avvienne che ſi fecero in *Conſolatione* tanti matrimonii, & che molte donne ſenza ſparger una lagrima per la morte de loro conſorti, ſubito s'appigliorno a nuovi partiti? Un giorno particolarmente, che ſe ne celibrono cinque, e quattro de' ſpoſi erano beccamorti, che con le ſpoglie de' cadaveri adornorno ſe ſteſſi, e le ſpoſe.

Amidſt ſo many dreadful fears and terrors, amid ſo many fetid and putrifying dead bodies, amid the ſhrieks, the ſighs, and groans of the ſick, what would you have expected? that the people ſtruck with dread and horror remained ſad, modeſt, and quiet. You are miſtaken—They ſung, played on inſtruments, danced, intrigued, and Genoa never was ſeen ſo ſhameleſs, debauched, and diſorderly—I have ſaid before that God in this plague gathered in a harveſt for heaven, but it ſeemed alſo to be a vintage for the laſcivious of the earth. If not ſo, how came ſo many marriages to be celebrated in the Lazaretto of the Conſolation, and that ſo many women, without ſhedding a tear for the death of their huſbands, immediately entered into new engagements? One day in particular, five marriages were performed, four of the bridegrooms being buriers of the dead, and dreſſing themſelves, and their brides, in clothes ſtripped off from the bodies of the deceaſed.

The following is an Extract from a Letter written by a Gentleman who reſided at Meſſina during the plague in 1743. "It has always been obſerved that after every "plague, thoſe who recover are addicted, in an extraordinary degree, to lewdneſs "and incontinence, which was ſurpriſingly viſible at Meſſina, and carried to ſuch a "degree of frenzy and beſtiality, that many were known to violate the bodies of "dead virgins: ſo great was the incitation to acts of venery." See Jordani Peſtis Phænom. tract. i. cap. 18. p. 217. Diemerbroeck de Peſte. lib. 2. cap. iii. p. 98.

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the exertions of the moſt vigorous police. This cauſe is generally ſuppoſed to be ſome change in the conſtitution of the air; but which has hitherto been defined with no better ſucceſs, than that peculiar ſtate of the atmoſphere which, in conjunction with contagion, is indiſpenſibly requiſite to render the plague epidemical.

Doctor Arbuthnot, admitting the air may be endued with occult or extraordinary qualities, beſides its common properties hot, cold, moiſt, &c. as ſaline, or oily, which it ſometimes ſeems to be, by its effects; and "that from the action of heterogeneous bodies contained in it, ſome new ſubſtances may be produced of a nature different from the ingredients."—Yet thinks there is no neceſſity always to have recourſe to ſuch occult qualities; "there being no change in human bodies known, but is "producible by the contents, properties and qualities, which we "are ſure the air is endued with, and eſpecially by their great "enormities and ſudden ſucceſſions and alterations." In reſpect to the plague, he thinks no one can deny that the air is the chief inſtrument both of propagating and extinguiſhing it. "And this "muſt be true from what cauſe ſoever you deduce the plague; "if from an animate cauſe, as from inviſible inſects, the favourable conſtitution of the air to their propagation muſt be ſuppoſed; if from infection of any kind, the air is the medium "through which it is propagated, and muſt favour it, more or "leſs, in different ſeaſons, becauſe by the change of the qualities "of the air, it is quite extinguiſhed, and generally ſpeaking by "cold; after the peſtilential ſeaſon is over, people return to their "houſes with ſafety."[42]

Doctor Mead had before obſerved, "that a *corrupted ſtate* of air "is, without doubt, neceſſary to give theſe contagious atoms their "full force; for otherwiſe it were not eaſy to conceive how the "plague, when once it had ſeized any place, ſhould ever ceaſe but "with the deſtruction of all its inhabitants: which is readily ac-

[42] Arbuthnot on Air, p. 174, 187.

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" counted for by ſuppoſing an emendation of the qualities of the " air, and the reſtoring of it to a healthful ſtate capable of diſſi- " pating and ſuppreſſing the malignity .... When the conſtitu- " tion of the air happens to favour infection, it rages with great " violence; that at that time more eſpecially, perſons give it to " one another, and contagious matter is lodged in goods of a " looſe and ſoft texture, which being packed up, and carried " into other countries, let out when opened, the impriſoned " ſeeds of contagion, and produce the diſeaſe whenever the air " is diſpoſed to give them force; otherwiſe they may be diſſipated " without any conſiderable effects." [43]

In what this particular conſtitution of the air conſiſts, which in one caſe favours the ſpreading of the diſtemper, and in the other checks or extinguiſhes it; whether it operates by heightening the powers of the infectious effluvia, or by inducing an epidemical change on the human body, whereby it is rendered more or leſs ſuſceptible of, or enabled to reſiſt their influence, the effluvia remaining the ſame; are points involved in much obſcurity. It ſeems in the mean while inconteſtible that without a concurrent ſtate of the air, the plague will not become epidemical; and without a certain diſpoſition of body, the infection will not take effect. " Although the air be in a right ſtate (ſays Mead) yet a ſick per- " ſon may infect thoſe that are very near him," [44] which is true, ſuppoſing them prediſpoſed to receive the infection: but on the other hand, even in a corrupted ſtate of the air, or rather that ſtate, whatever it be, which favours the propagation of contagion, ſome perſons, from a peculiar unſuſceptibility, are often known to approach the ſick without being injured. Were I to adopt one of ſeveral in this region of conjectures, I ſhould be inclined, for the following reaſons, to that which ſuppoſes the conſtitution of the air acting on human bodies, by heightening or leſſening their ſuſceptibility of contagion, rather than by heightening or abating

[43] Mead on the Plague, p. 57, 69.

[44] Ibid. p. 52.

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the malignity of the peſtilential effluvia.[45] Firſt, in the beginning of a peſtilence, the diſeaſe, though leſs contagious, appears in its moſt fatal form. Secondly, in its increaſe and height, though manifeſtly more infectious, the malignity of the effluvia does not ſeem to be exacerbated, becauſe milder forms of the diſeaſe are then more common. Thirdly, ſeveral perſons infected from the ſame ſubject, are variouſly afflicted, ſome in a greater, ſome in a leſſer degree; the diſeaſe being modified by difference in conſtitution. And laſtly, perſons in conſtant communication with the ſick, who have reſiſted infection in the moſt contagious ſtages of a peſtilence, are ſometimes attacked in its declining ſtate; which ſeems to indicate ſome change in the habit of the individual, not the increaſed activity of the contagious effluvia.

[45] Ovverro potrebbe immaginarſi, che tali venti & vapori, ſenza cangiar punto la qualità di queſto veleno, cangiaſſero la coſtituzion dell'aria, e de' corpi humani di quella città, onde eglino da li innanzi non ſentiſſero ſi preſto, nè provaſſero coſi fiero queſto crudeliſſimo morbo, rendendoſi diſpoſti a maggiormente reſiſtergli. Muratori, lib. 2. c. iv. p. 161.

Or one may imagine that ſuch winds and vapours, (impregnated with certain properties) without, in the leaſt, changing the quality of the peſtilential poiſon, may produce ſuch an alteration in the conſtitution of the air, and in that of the human bodies, inhabiting the infected city, as renders them leſs ſuſceptible of its impreſſion; and, by enabling the conſtitution to reſiſt more powerfully, mitigates the ſeverity of that moſt cruel malady.

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The Plague, declining in the City of Marſeilles, ſpread in the adjacent Territory—Expurgation of the City.—Decline of the Plague in Egypt and Syria.—The Plague leſs Contagious in its Decline.—Decline of the Plague at London, Anno 1665—Peſtilential Conſtitution of the Air varies in its Degree and Duration—It does not conſiſt in Enormities of the known properties of the Air.—Commerce with Places infected may ſubſiſt without ill Conſequence in the Abſence of the Peſtilential Conſtitution.

THE fourth period of the plague at Marſeilles, comprehends the months of December and January, through which the diſtemper continued decreaſing ſenſibly in the city, whilſt it increaſed in the territory adjacent:[1] as will appear in one view from the ſubjoined ſtate of the hoſpitals.[2]

[1] Relat. Hiſtor. p. 358, 363.

[2] The principal hoſpitals were two, de la Charité, and du Mail. The patients in the firſt were all of the city; the ſecond received both thoſe of the city, and from the territory: both were opened the 3d of October 1720. In March 1721 the Charité was ſhut up, and about one hundred of the remaining ſick were removed to the hoſpital du Mail. The ſick of the city in both are given together; thoſe of the territory are given ſeparately.

Both Hoſpitals, ſick from the City.			Hoſpital of the Mail, ſick from the Territory.	
	Months.	Received.	Died.	Received.	Died.
1720.	October	862	458	7	7
	November	406	258	49	29
	December	193	143	63	37
1721.	January	154	70	165	73
	February	87	52	91	53
	March	127	8	67	57
	April	19	13	65	57

General State.

	Received	Died	Diſcharged
L'hopital de la Charité from the 3d of October to the end of February.	1013	585	358
L'hopital du Jeu de Mail from Oct. the 3d to July.	1512	820	692

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In January and February a general expurgation of the city was attempted with infinite pains and labour;[3] and it may be conſidered as a proof of the air having become unfavourable to contagion, that the diſeaſe was not more ſenſibly renewed in the rummage, removal, and purifying infected goods; for in the former month 154 patients only were received into the hoſpital, and in the latter 87: yet the danger of infection ought to have been greater than in the preceding months, when depopulated houſes were kept ſhut up, and nothing within permitted to be touched.

This circumſtance is the more remarkable, ſeeing the diſtemper was ſpreading in the adjacent territory, in the very months when it was rapidly declining in the town, without any manifeſt difference in the common qualities of the air; not to mention its breaking out in the winter ſeaſon in ſeveral towns of Provence, as Toulon, Arles and Auriol, where it appears in the ſequel to have made no leſs havock than at Marſeilles.

There could be no compariſon between the quantity of contagious miaſmata preſerved in ſtuff of all kinds, and diſperſed in Marſeilles, in the months of January and February, and that which kindled the peſtilence in the towns above-mentioned, to which it was ſuppoſed to be conveyed by imported contagion. Why therefore was not the diſtemper revived in Marſeilles? or what other cauſe than ſome change in the air can be ſuppoſed to have reſtrained the operation of the peſtiferous effluvia? It is true thoſe choſen in preference for cleanſing the houſes, and for other dangerous offices, were perſons recovered from the plague, and conſequently leſs liable to contract it again; it is likewiſe true, for a ſimilar reaſon, that in all quarters, the number of ſurviving ſubjects liable to infection was greatly reduced; but ſtill many remained in the city who hitherto had not been infected.

[3] Relat. Hiſtor. p. 432.

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The number of inhabitants of Marſeilles, at the commencement of the peſtilence, was reckoned to be ninety thouſand, of which forty thouſand are ſuppoſed to have periſhed :[4] but ſeeing a conſiderable proportion of the ſick in the 4th and 5th claſſes recovered, it may be preſumed that twenty, or at leaſt ten thouſand perſons remained untouched. This was a conſiderable number without any other privilege of exemption than want of prediſpoſition requiſite to infection; for an infinitely ſmaller quantity of contagious effluvia, raiſed and ſpread the peſtilence in other places in the ſame ſeaſon of the year.

Notwithſtanding the general expurgation of the houſes and furniture, and the vigilance of the magiſtrates in removing perſons immediately, when taken ſick, to the hoſpital, and putting the reſt of the family in quarantine, the diſtemper lingered in the town till the month of July.[5] In March there was an obſervable increaſe of patients in the hoſpital, chiefly conſiſting of what were termed relapſes;[6] but in April the number fell to 19 from 127; and after that, till June, the diſtemper was merely ſporadic. It had declined rapidly, but its diſappearance was ſlow and gradual, not ſudden; in which circumſtance its termination agreed with that of the plague at Aleppo, and I believe with that of all plagues in the Levant; in which country, as obſerved before in the Journal, the peſtilence is commonly ſaid to be over, and the communication, even with the Europeans, begins ſeveral weeks before the diſtemper abſolutely ceaſes.

[4] In the eſtimate of the number of inhabitants of Marſeilles, and the number deſtroyed by the plague, I follow the Traité de la Peſte, p. 464. The Relation Hiſtorique, p. 476, reckons one-half of the inhabitants were deſtroyed, that is 40,000 in the town and 10,000 in the territory; but obſerves, at the ſame time, that it was impoſſible to know the number exactly.

[5] Relat. Hiſtor. p. 451.

[6] See on this Subject, Book ii. Chap. 6th.

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This has been juſtly remarked in the Relation Hiſtorique, when it places the termination of the fourth period of the plague in March 1721. " En mettant ici la fin de la peſte, nous ſuivons " l'uſage du Levant, où elle eſt familiere, & où on la regarde " comme finie, quand on voit ceſſer la mortalité, & qu'il ne pa- " rôit plus que quelque malade en des tems fort éloignez l'un " de l'autre, comme il eſt arrivé ici dans tous les autres mois qui " nous reſtent à décrire."[7]

Proſper Alpinus, in his account of the termination of the plague at Grand Cairo, repreſents it as ceaſing in a manner at once in the month of June, " Junio vero menſe, qualiſcumque et quantacum- " que ſit ibi peſtilentia, ſole primam cancri partem ingrediente, " omnino tollitur, quod multis plane divinum eſſe non immerito " videtur. Sed quod etiam valde mirabile creditur, omnia " ſupellectilia peſtifero contagio infecta, tunc nullum contagii " effectum in eam gentem edunt, ita ut tunc ea urbs in tutiſſimum " ac tranquilliſſimum ſtatum reducatur, ex ſumme morboſo; atque " morbi particulares ſporadici tunc apparere incipiunt, qui nuſ- " quam gentium tempore peſtis apparebant."[8]

But, in this matter, I was inclined to ſuſpect Alpinus had truſted too implicitly to the traditions of the natives, who ſpoke in the ſtyle of the Levant; and upon making ſtrict enquiry, my conjecture was confirmed by ſeveral accounts received from perſons long reſident at Cairo, Europeans as well as Natives, all which concurred in the plague's declining rapidly in June, but not ceaſing entirely.[9]

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[7] Relat. Hiſtor. p. 451.

[8] Proſper Alpinus, de Medicina Ægypt. lib. i. cap. 17.

[9] The account given by Proſper Alpinus is, in ſome meaſure, confirmed by my friend Mr. Bruce, in his celebrated Travels lately publiſhed. (Vol. 3. p. 716.) After ſome curious remarks on the dew or *nukta*, which in Egypt falls preciſely on St.

In moſt places of the Levant, a popular tradition is to be found of the extinction of the plague at a certain fixed period, which varies, CHAP. V.

St. John's day,* he ſays, "The firſt and moſt remarkable ſign of the change brought "about in the air is, the ſudden ſtopping of the plague at St. John's day; every "perſon though ſhut up from ſociety for months before, buys, ſells, and communi- "cates with his neighbour without any ſort of apprehenſion; and it was never known, "as far as I could learn upon fair enquiry, that one fell ſick of the plague after this "anniverſary; it will be obſerved I don't ſay *died*; there are I believe examples of "that, though I believe but few; .... what I ſay and mean is, that no perſon is "taken ill of the plague ſo as to die after the dew has fallen in June; and no ſymp- "toms of the plague are ever commonly ſeen in Egypt, but in thoſe ſpring months "already mentioned, the greater part of which are totally deſtitute of moiſture.

"The Turks and Moors are known to be predeſtinarians ..... ſecure in this prin- "ciple, they expoſe in the market place, immediately after St. John's day, the "clothes of the many thouſands that have died during the late continuance of the "plague, all of which imbibe the moiſt air of the evening and morning, are handled, "bought, put on, and worn without any apprehenſion of danger: and though theſe "conſiſt of furs, cotton, ſilk and woollen cloths, which are ſtuffs the moſt retentive "of the infection, no accident happens to thoſe who wear them from their happy "confidence."

Had all the facts now ſtated been of a nature to fall under Mr. Bruce's immediate obſervation, I ſhould have been induced, from my knowledge of his accuracy, to have changed an opinion formed on the ſubject many years ago, in conſequence of information obtained, at that time, from an eminent Venetian merchant, whoſe houſe has been long eſtabliſhed at Cairo, and who, at my requeſt, was ſo good to examine the houſe's copy book of letters, and other records, regarding the periods of the plague's de- cline and termination. The anſwer received was to the following purpoſe, "That the "plague in general, begins to decline faſt in June, after the firſt week of which "month the Europeans ſometimes venture to viſit one another in the night, when "there is little hazard of meeting with perſons in the ſtreet.—That in the day time "they continue ſtrictly ſhut up till the 24th, and then if they do open or come abroad, "it is not altogether without certain precautions; for though accidents may have be- "come very rare, they certainly do happen after that period. In 1759 the Euro- "peans remained ſhut up till the middle of July; which was conſidered as very extra- "ordinary."

Some natives of Cairo, with whom I had occaſion to converſe on the ſame ſubject, agreed in the above circumſtances, upon being queſtioned particularly; but

* See Niebuhr Voyage en Arabie, V. 1. p. 104.

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varies, however, at different places. At Aleppo it is fixed nearly a month later than at Cairo.

A chaplain of Aleppo, in the year 1600 obſerves, "that the "plague broke out in March, by reaſon of which all traffick was "hindered, and thoſe merchants whom they call Franks or "Freemen, either removed to other places, or ſuch as ſtaid in "the city cauſed their gates to be ſhut up, and came not abroad "till Sol entered into Leo, which is uſually the 12th or 13th "of July, at which time the plague ſtill ceaſeth in this place, "though it be never ſo great, and all that are then ſick amend, "and ſuch of them as come abroad need not fear any danger."[10] This gentleman, Mr. Biddulph, with a party of gentlemen of the factory, ſet out that year for Jeruſalem, in March; but it does not appear at what time they returned.

Mr. Biddulph had been only a ſhort while in the country, and truſted to the report of the natives, among many of whom a ſimilar notion of the extinction of the plague at Aleppo ſtill maintains credit, though in expreſs contradiction to every plague which has ſince viſited that city.

The decline and extinction of the plague in the Levant, purſue therefore nearly the ſame courſe as deſcribed in the plague of

in general the Natives, the Chriſtians eſpecially, talk of the extinction of the plague at Cairo on St. John's day.

On comparing this account with thoſe given by Proſper Alpinus, and my friend Mr. Bruce, it appears more conſiſtent with what I had occaſion myſelf to obſerve in Syria; for in every place the plague is repreſented by the natives, as ceaſing at a certain period, ſometime before it is actually extinct. At Aleppo, ſoon after St. John's day, I have ſeen a funeral proceſſion made by the lower rank of Chriſtians, who carrying an empty bier through the ſtreets, call it the burial of the plague. In the mean while it is agreed on by all, that about the 24th of June, at Cairo, there is a remarkable ſudden alteration in the contagious property of the plague, as well as in the malignity of the diſeaſe itſelf, to whatever cauſe it is to be aſcribed.

[10] Purchas's Pilgrim. p. 1345.

Marſeilles;

Marſeilles; allowance being made for difference of ſituation and climate. But in the Levant, it may ſometimes appear to ſtop more ſuddenly than it does in reality, on account of the pains taken by the natives to conceal accidents when they become rare, or happen in places remote from the European houſes, a circumſtance repeatedly marked in the Journal of the plague of Aleppo[11]. CHAP. V.

The ſecond part of Alpinus's remark, that at the ſame time the peſtilence ceaſes, the furniture in infected houſes ſuddenly loſes all power of communicating the diſeaſe to the inhabitants, ſo that health and tranquillity are at once reſtored to the city, agrees in ſome meaſure with the general experience of other places in Turkey, where it is well known houſes or goods undergo little or no purification: but this is to be underſtood with ſome reſtriction.

We have ſeen at Marſeilles, that thoſe taken ill in November and January, were moſtly perſons of the lower claſs, who had raſhly expoſed themſelves in handling infected goods, or in communication with the ſick[12]. I met with inſtances of the like kind at Aleppo, after the ſuppoſed extinction of the plague; and have been credibly informed ſuch alſo happened at Cairo. I have no doubt Alpinus was miſtaken in aſſerting the plague ceaſes at once; and it is not improbable the lingering accidents obſerved there, as well as in other parts of Turkey, may be produced by the like cauſes that produced them at Marſeilles. At the ſame time it muſt be allowed, as before remarked, that inſtances of freſh infection, in the latter ſtage of a peſtilence, bear no proportion to the quantity of polluted goods ſcattered in the place; and it may be conſidered as another argument in favour of the power of the peſtiferous miaſmata not being impaired, that the ſame goods handled ſafely in one place, convey and ſpread con-

[11] See before, book i. chap. 4, 5, 6.

[12] Relat. Hiſtor. p. 338, 367.

tagion

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tagion in another, where the ſtate of the air happens to concur to its propagation. This fact, of material conſequence to quarantine, will be conſidered more particularly in the next chapter.

The termination of the laſt plague of London, in 1665, will be found to agree, in many circumſtances, with the foregoing narrative of the decline and termination of the plague of Marſeilles. Its decline was rapid, but it continued lingering great part of the ſucceeding year.

The Explainer of Mead's Diſcourſe, cites the following paſſage from Hodges, "The houſes which before were full of the dead, "were now again inhabited by the living; and the ſhops which "had been moſt part of the year ſhut up, were again opened, "and the people again chearfully went about their wonted affairs "of trade and employ, and even, what is almoſt beyond belief, "thoſe citizens who were before afraid even of their friends and "relations, would, without fear, venture into the houſes and "rooms where infected perſons had a little before breathed their "laſt: nay, ſuch comforts did inſpire the languiſhing people, "and ſuch confidence, that many went into the beds where "perſons had died, even before they were cold or cleanſed from "the ſtench of the diſeaſe[13]." In this account, (adds the explainer) "there is no want of a neſt or fomes, for here is "wool, linen, ſilk, and perhaps even treacherous cotton itſelf— "*yet no farther contagion appeared*, but men eagerly purſued their "buſineſs, and thought how to repair the paſt mortality, and "that with more than ordinary ſucceſs[14]."

Doctor Pye, upon the ſame paſſage of Hodges, makes the following comment, "here it is expreſsly affirmed, that thoſe who "went near the ſick, and even into their beds, *did not catch this*

[13] Mead's Diſcourſe explained, p. 36.

[14] It may be remarked, that the words printed in Italics, are not found in Hodges. Loimolog. p. 27.

"*ſickneſs*,

" *ſickneſs*, and yet the peſtilence was very far from being ceaſed " at that time - - - Wherefore ſince thoſe who acted in this " manner received no injury, even though the peſtilence ſtill " raged exceedingly; we muſt conclude, that the peſtilence de- " pended entirely on the conſtitution of the air, and was not at " all communicated from ſick perſons[15]."

But in the paſſage from Hodges produced by theſe writers, it is neither expreſsly affirmed, nor indeed hinted, " that thoſe who " went near the ſick, and even into their beds, did not catch " the ſickneſs." Such raſh proceedings are placed early in November, in the firſt week of which month 1414 died, and in the ſecond 1050, which ſhows the diſtemper ſtill ſubſiſted in a conſiderable degree; but Hodges no where ſays, that among the perſons then infected none of thoſe were included who had expoſed themſelves in ſuch an imprudent manner, as he thinks will ſeem incredible, conſidering the terror and apprehenſion univerſally prevalent juſt before.

The impatient eagerneſs of the citizens, in entering houſes that had been infected, in taking poſſeſſion of goods and furniture, and even the intemperate rage for marriage, are circumſtances mentioned alſo in the plague of Marſeilles; but it ſtands there recorded, that many ſuffered for their temerity. I think it can hardly be doubted, that the like conſequences ſometimes happened at London; at leaſt nothing expreſsly to the contrary appears in the paſſage cited from Hodges, and the continuance of the diſeaſe in ſo high a degree in the ſubſequent months, may

[15] Remarks on Three Treatiſes, with additional Notes, p. 13. It is worth obſerving, that the Explainer and Doctor Pye, though they differ in the mode, agree in miſrepreſenting the paſſage from Hodges. The one affirms no farther contagion appeared, the other that the peſtilence ſtill ſubſiſted in a conſiderable degree.

perhaps

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perhaps be partly imputed to the neglect of the meaſures purſued at Marſeilles[16].

From the manner in which Hodges expreſſes himſelf, the diſtemper would ſeem to have ceaſed entirely in the winter. "The "next year indeed appeared ſome remains of the contagion "which was eaſily conquered by the phyſicians, and like the "termination of a common intermittent fever, ended in a health-"ful recovery; whereupon the whole malignity ceaſing, the city "returned to a perfect health[17]." Sydenham in like manner repreſents it as appearing only here and there in the winter, and the beginning of the ſpring, "Urgente brumali frigore tantum non evanuit, niſi quod ſparſim unum atque alterum hinc inde feriret per omnem hyemem, & inſequentis veris exordium, quo appetente et ipſa omnino deleta eſt; manſit tamen febris, quamvis non ita epidemica, excurrente integro anno ſequente, imo ad ver-uſque ortum anni 1667[18]."

[16] A paſſage from a book, publiſhed in 1665, relative to the plague in 1625, would have been more directly to the purpoſe of Mead's opponents, than that from Hodges. "But leaſt any one with over much care ſhould prejudice their own "private affairs, or the trade of this royal city of London, - - - he may be in-"formed, that in the ending of the laſt great ſickneſs, (1625) the people went pro-"miſcuouſly one among another, and the houſes were quickly filled with inhabi-"tants, and freſh comers out of the country, and yet no infection followed. And "I remember, that in the loyal city of Briſtol (the place where I was born) about "twenty years ago, many houſes were ſhut up, and hundreds died every week of "the plague, both before and during the ſiege, whilſt it was kept for the King's "moſt excellent Majeſty, by that moſt renowned and valiant commander his High-"neſs Prince Rupert; but as ſoon as ever the enemies entered in, as if the leſſer "plague vaniſhed and departed at the approach of a greater, the ſoldiers made no "great difference of quartering in any houſes, or coming into any company, and "the inhabitants returned to their forſaken dwellings at one gate, whilſt the peſ-"tilence went out at the other, and hath not hitherto returned again."

Kemp on the Peſtilence, p. 39, Lond. 1665.

[17] Hodges Loimolog. p. 28.

[18] Sydenham Oper. Lugd. Bat. 1726. ſect. 2. cap. 1. p. 106.

Neither

Neither of theſe accounts correſpond with the bills of mortality, which make the number of perſons who died of the plague, in 1666, amount to two thouſand. This would ſeem to be a mortality too conſiderable to be ſpoken of ſo ſlightly, had it been known to thoſe gentlemen. We muſt therefore ſuppoſe the plague prevailed in quarters diſtant from where they practiſed, or that the fever termed by Sydenham peſtilential, often paſſed in the bills for the true plague. I ſhould be more inclined to the latter ſuppoſition, but for a remark of Graunt's, which ſeems to be well founded, that the number of thoſe who die of the plague is generally extenuated in the bills, not exaggerated[19].

It is however ſufficiently clear, that the diſtemper lingered, as it had done at Marſeilles, for ſeveral months after its rapid decline in the winter; and if we conſider that the expurgation of houſes, and the ſeparation of the ſound from the ſick, was not much more attended to at London in the decline of the plague, than in the Levant, it muſt be allowed that the quantity of peſtiferous miaſmata remaining in the city, might have renewed the diſtemper, had not the conſtitution of the air been unfavourable to contagion.

The ſtate of the air inſtrumental in propagating the plague varies in its degree of power, as alſo in its duration. At Aleppo, in 1742, the peſtilential conſtitution continued three years, of which the middle year, 1743, was the moſt, and the laſt, 1744, the leaſt ſevere[20]. In 1760 it continued alſo three years, but the laſt of the three was the moſt, and the firſt the leaſt ſevere.

The variation of peſtilential conſtitutions at London is ſtill more conſiderable. The plague of 1603 laſted eight years; in

[19] Natural and Political Obſervations, &c. J. Graunt, 2d edit. Lond. 1662, and Collection of ſcarce Pieces relating to the Plague in 1665, p. 53.

[20] Nat. Hiſtory of Aleppo.

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ſome whereof there died four thouſand, in others above two thouſand, and in but one leſs than ſix hundred. The plague of 1636 laſted twelve years; in eight whereof there died two thouſand and odd a year, one with another, and never under three hundred and fourteen, as appears from the following table[21].

In London.		In London.	
Years.	Died of the Plague.	Years.	Died of the Plague.
1603	30561	1636	10400
1604	896	1637	3082
1605	444	1638	363
1606	2124	1639	374
1607	2352	1640	1450
1608	2262	1641	1375
1609	4204	1642	1274
1610	1083	1643	996
1611	627	1644	1492
		1645	1871
		1646	2365
		1647	3597
		1648	611

The ſudden ſubſultory increaſe and decreaſe of the weekly funerals, from one hundred and eighteen in one week, to nine hundred and twenty-ſeven in the next; from nine hundred and ninety-three, to two hundred and fifty-eight, and from thence again, the very next week, to eight hundred and fifty-two; is alſo remarkable.

[21] Graunt's Natural and Political Obſervations, &c. p. 33. Lond. 2d. edit. 1662. Collection of very valuable and ſcarce Pieces relating to the Plague 1665, p. 81. Lond. 1721.

I do

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I do not find a general weekly table in my edition of Graunt, and I ſhall therefore ſubjoin two tables[22], one of the weekly funerals in the laſt five great plagues at London, and in two years of the laſt plague at Aleppo. Another, ſhowing the monthly increaſe and abatement of the plague at London, Dantzick, and Aleppo. From the former it will appear, that this fluctuation in the mortality is common to different years, and to different countries; while the ſecond table exhibits at one view, the comparative courſe of the diſeaſe in the cold, and in the more temperate climates.

It ſhould be remarked here, that the mortality at Aleppo, in the months of October, November and December, 1761, was not produced ſolely by the plague, but principally by other mortal diſtempers, then prevalent. The ſame remark being applicable to the months of January, February, and March, 1762, the weekly bills for theſe months are omitted in Tab. I; and, though inſerted in Tab. II, for March, it is to be underſtood that a great part of the mortality was owing to diſeaſes diſtinct from the plague. The difficulty, in the winter months, of diſcriminating peſtilential funerals exactly, was the reaſon for omitting them in Tab. II.

[22] Taken partly from London's Deliverance predicted, by John Gadbury, Lond. 1665. See Short's Comparative Hiſtory, p. 5. Lond. 1767.

TABLE I.

Showing the Increaſe and Abatement of the Plague at London - - - - - - and at Aleppo.

Months	Weeks	1593	1603	1625	1636	1665	1761	1762
January	3							
	10							
	17							
	24							
	31							
February	7							
	14							
	21							
	28							
March	17	3	3	4				
	24	31	2	8				
	31	29	6	11				
April	7	27	4	10	2		58	165
	14	33	4	24	4	2	88	240
	21	37	8	25	14		125	205
	28	41	10	26	17		113	257
May	5	29	11	30	10	9	171	303
	12	38	18	45	55	3	139	254
	19	42	22	71	35	14	177	296
	26	58	32	78	62	17	290	579
June	2	62	30	69	67	43	670	710
	9	81	43	91	87	112	543	874
	16	99	59	105	103	168	505	1208
	23	108	72	239	79	267	612	1273
	30	118	158	390	104	470		1472
July	7	927	262	593	81	725	708	998
	14	893	424	1004	104	1089	483	506
	21	258	917	1819	120	1843	296	379
	28	852	1396	2471	151	2010	239	232
Auguſt	4	983	1922	3659	206	3817	102	136
	11	797	1745	4115	283	3880	110	112
	18	651	2713	4463	321	4237	90	71
	25	449	2539	4218	429	6102	108	68
							66	
September	1	507	3035	3344	638	6988	76	66
	8	563	2724	2550	650	6544	98	42
	15	451	2818	1072	865	7165	66	48
	22	349	2195	1561	775	5533	78	68
	29	330	1132	852	928	4929		
October	6	327	1641	538	921	4327	85	
	13	323	1149	511	752	2665	106	
	20	308	642	331	555	1421	66	
	27	302	580	134	458	1031	110	
							156	
November	3	301	554	89	838	1414	137	
	10	209	442	92	705	1050	116	
	17	107	251	48	573	652	1	
	24	93	105	27	476	333	167	
Decemb.	1	94	102	15	312	210	166	
	8	86	52	15	167	243	156	
	15	71	96	6	85	281	166	
	22	39	74	1	76		105	
							99	

TABLE II.

Showing the monthly Increaſe and Abatement of the Plague at London, Dantzick and Aleppo.

Months	London.					Dant-zick.	Aleppo.	
	1593	1603	1625	1636	1665	1709	1761	1762
March	63	11	23					398
April	138	26	85	37	2		384	867
May	167	83	224	162	43		777	1432
June	468	362	954	440	1060	319	2330	5537
July	2930	2999	5887	456	5667	1313	1723	2115
Auguſt	2880	8919	16455	1239	17036	6139	476	387
September	2200	12504	9979	3856	31569	8303	318	224
October	1260	4012	1514	2786	9444	4932		
November	710	1352	256	2602	3449	1961		
December	290	324	37	640	734	584		

The courſe of the diſtemper in different years, "ſhows (according to Graunt) "that the contagion of the plague depends "more upon the diſpoſition of the air, than upon the effluvia "from the bodies of men;" and he thinks, "the fluctuation in "the weekly bills ought rather to be attributed to change of the "air, than to change of the conſtitution of men's bodies, other-"wiſe than as it depends upon that.[23]

The termination of the plague at London, in 1625, of which above thirty-five thouſand died, was quicker than that of any of

[23] Graunt, p. 33. Collection of ſcarce Pieces, p. 81. Sydenham Opera, de Morb. epidem, cap. ii. p. 47.

the

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the other years; for in the laſt week of October the burials were reduced to one hundred and thirty-four; in the firſt week of December, to fifteen; and in the year 1626, there died only one hundred and thirty-four: whereas in 1665, there died in the firſt week of November one thouſand four hundred and fourteen; and in the year 1666, two thouſand. At Aleppo in 1762, there died in the firſt week of July, one thouſand two hundred and forty-nine; in the laſt week three hundred; in the firſt week of Auguſt one hundred and eighty-three; in the laſt week fifty-eight: in September the diſtemper vaniſhed.

All theſe circumſtances are in favour of Graunt's concluſion. But I do not find any correſpondent enormity in the ſeaſons, or change in the common qualities of the air, from which the fluctuation and variation of the peſtilence in its courſe, in different years, can be ſatisfactorily accounted for. At leaſt, at Aleppo, though ſtrictly attentive, I was not able to diſcover any irregularity in the ſeaſons to which could be aſcribed the reſtrained progreſs of contagion in 1760, its increaſed vigour in 1761, its raging ſo fatally, and its final extinction in 1762. I have judged it nevertheleſs proper, in the Appendix, to give a meteorological account of the weather for five years, including the year preceding and that following the peſtilential conſtitution; and have annexed to that account ſome comparative remarks on the ſeaſons in the former plague of Aleppo in 1742, 1743 and 1744. A more extenſive ſeries of obſervations may be requiſite for forming concluſions; in the mean while, what I have been able to collect, are ſubmitted as materials to thoſe more converſant in ſpeculations of this kind. I ſhall only add further, that the uſually regular viciſſitude of the ſeaſons in Syria, may probably render it eaſier to detect enormities, when they happen, than in more variable climates, ſubject to unequal weather in all ſeaſons, and often to ſudden changes from one extreme to the other.

The

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The plague, in common with other epidemic diſtempers, has its ſeveral ſtages. "Porro et ſua habet incrementi, ac declinationis "tempora non ſecus ac cæteræ rerum naturalium ſpecies."[24] Theſe ſtages, however, vary in different climates, and ſometimes in the ſame climate, in different years, as may be collected from the foregoing Table II.

In ſome epidemical diſtempers, the ſudden alternations of the air, have conſtant and manifeſt influence; in others, though the influence of the air muſt be equally admitted, it ſeems not to depend on ſenſible alteration or ſucceſſion in the common properties of the atmoſphere, but on ſome inexplicable combination, ſome occult, new, unknown, quality. Amongſt epidemics of this laſt kind muſt be reckoned the plague. "Variæ ſunt nempe annorum con-"ſtitutiones, (ſays Sydenham, ſpeaking in general of epidemical diſtempers) "quæ neque calori, neque frigori, non ſicco humi-"dove, ortum ſuum debent, ſed ab occulta potius, et inexplicabili "quadam alteratione in ipſis terræ viſceribus pendent, unde aër "ejuſmodi effluviis contaminatur, quæ humana corpora huic "aut illi morbo addicunt, determinantque; ſtante ſcilicet præfatæ "conſtitutionis prædominio, quæ, exacto demum aliquot anno-"rum curriculo, faceſſit, atque alteri locum cedit .... Quamvis "autem diverſas diverſorum annorum habitudines, quoad ma-"nifeſtas aeris qualitates, maxima qua potui diligentia notave-"rum, ut vel exinde cauſſas tantæ epidemicorum viciſſitudinis ex-"piſcarer, me tamen ne hilum quidem hactenus promoveri ſentio; "quippe qui animadverto annos quoad manifeſtam aeris temperiem,

[24] Sydenham in his uſual accurate manner, deſcribes the ordinary courſe of the plague in England. "Quamquam autem hic morbus, cum dumtaxat ſporadicus exiſtit, nullo "tempeſtatis diſcrimine paucos aliquot, tradito quaſi per manus contagio, affligat, "tamen ubi adeſt etiam epidemica aeris conſtitutio, exoritur circa eam anni partem "quæ inter ver ac æſtatem ambigit ..... creſcente anno adolefcit, eadem que "vergente collabaſcit, donec tandem aerem in diathefin huic morbo adverſantem, "glacialis bruma tranſmutet." Sydenham oper. ſ. 2. cap. ii. p. 108.

ſibi

BOOK III. " ſibi plane conſentientes, diſpari admodum morborum agmine " infeſtari & vice verſa[25]."

Should ever that ſtate of the air, without the concurrence of which the contagion of the peſtilence never ſpreads, or ceaſes to act, be diſcovered and aſcertained by unequivocal marks, the dread of the plague univerſally prevalent, would be greatly diminiſhed; more effectual means of preſervation would be found out, and the application of them might ſafely be limited to certain ſeaſons.

Experience in Turkey, where generally no precautions are taken in the times of peſtilence, clearly evinces, that in a certain ſtate of the air, a communication with infected places may ſubſiſt without any material conſequence. The return of the plague at Aleppo, happens at irregular periods; the intervals are of conſiderable, but unequal length; and in thoſe the commerce with Egypt, Conſtantinople, and Smyrna, remains uninterrupted. In the intervals between 1744 and 1760, and from 1762 to 1780, the plague raged ſeveral times in the places now mentioned, without affecting Aleppo; and even in two or three years ſubſequent to 1762, though it was at Maraſh, as well as other places not far diſtant, with which Aleppo has continual intercourſe, no inſtances were diſcovered of communicated infection[26]: if ſuch happened, they muſt have eſcaped my utmoſt vigilance; and the daily exerciſe of my profeſſion led me to be very much among

[25] Sydenham Oper. de Morb. Epidem. cap. ii. p. 41. Van Swieten was not more fortunate, by his own account, than Sydenham. See Commentary on Boerhaave, ſect. 1408, vol. v. p. 170.

But though the plague cannot be aſcribed to enormities in the ſenſible qualities of the air, theſe may have an effect in rendering the conſtitutions of men more or leſs ſuſceptible of infection. " Fatendum tamen eſt, predictas aëris qualitates corpora " noſtra, ad hujus illiuſve morbi epidemici generationem, magis minuſve diſponere, " quod et de quocumque errore circa ſex res non naturales dictum volo." Sydenham Oper. de Morb. Epidem. cap. ii. p. 42.

[26] See Hiſtorical Journal, lib. i. chap. 7.

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the natives of all ranks. At the ſame time I have reaſon to ſuſ- CHAP. V.
pect that infected families from ſome of theſe places took refuge in Aleppo; and I know with certainty, that not only ſome merchants of that city, who happened to be at Maraſh when the plague broke out there, returned to their families in the ſummer of 1763, but that caravans of various merchandiſe arrived in the courſe of the ſame ſummer. Suſpicious intercourſe of a ſimilar kind, though to all appearance harmleſs at that time, had, in the year 1760, been productive of fatal conſequences, and in ſeveral inſtances, I had an opportunity of tracing the contagion clearly from its ſource.

I conſider it therefore as an eſtabliſhed fact in the Levant, that commerce and intercourſe with infected towns, is ſometimes attended with no bad conſequence. The ſame thing may perhaps be aſſerted, without reſtriction, of all countries; but till the ſigns indicating a peſtilential conſtitution be aſcertained, no particular year can be declared exempt from danger. Predictions founded on planetary conjunctions have been long exploded; and ſigns derived from the known properties and alterations of the air, are almoſt equally fallacious. The ſeaſons concomitant with plagues in England, as well as elſewhere, have been very diſſimilar; and the ſame viſible concurrence, uſually deemed peſtilential, has often in the revolution of years been obſerved to return in various countries, without producing the dreaded conſequences. Upon the whole, from all I have been able to collect, the peſtilential conſtitution ſeems hitherto to be known only from its effects; neither its approach nor its retreat can be predicted; and its nature remains wrapt up in myſterious darkneſs. "At vero "quæ qualiſque ſit illa aeris diſpoſitio, a qua morbificus hic appa- "ratus promanat, nos pariter ac complura alia, circa quæ vecors "ac arrogans philoſophantium turba nugatur, plane igno- "ramus[27]."

[27] Sydenham Oper. ſect. 2. cap. ii. p. 107.

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The plague terminates nearly in the ſame manner in all towns—General expurgation of infected towns expedient, though not always neceſſary—Of ſervice where the peſtilential conſtitution is protracted ſeveral years—Conjectures on the continuance of the plague at London for ſeveral ſucceſſive years, in the laſt century—The opinion of Britain being ſubject to periodical returns of the peſtilential conſtitution examined—Sydenham vindicated.

THE plague, however it may vary in its duration, ceaſes at laſt; and from what has been ſaid of London, Aleppo, and Marſeilles, it would ſeem as if there was little obſervable difference in the mode of its termination, in cities where purification was practiſed, and where it was not.

This leads to the conſideration of ſome points of importance, ſo far as reſpects the adminiſtration of police in the decline of a peſtilence.

1ſt. How far a general quarantine and expurgation, in the manner practiſed at Marſeilles, becomes neceſſary or expedient for haſtening the extinction of the plague, or preventing its reſuſcitation on the return of the ſpring.

We have already ſeen that the plague at Marſeilles began to decline long before it was in the power of the police to attempt the general expurgation of the city, which took place in the ſequel; and that the meaſures taken for that purpoſe, however vigorouſly purſued, did not ſucceed in extinguiſhing the diſtemper entirely, which continued lingering ſeveral months after. Had therefore the peſtilential conſtitution of the air continued, there can be little doubt that the plague would have ſpread at Marſeilles, to a certain degree, in the year 1721, in the ſame ſeaſon which

which in the year preceding had proved ſo fatal. We have ſeen alſo at Aleppo in 1762, that the plague ceaſed completely without any exertion whatever on the part of the police; and experience in other places of Turkey, as well as at London, Nimuguen and Dantzick, furniſh ſimilar examples. CHAP. VI.

Hence it may be inferred, that the termination of the plague of Marſeilles was owing principally to a change in the conſtitution of the air; and that a general quarantine and purification are not indiſpenſably neceſſary. At the ſame time it does not follow that they are in no circumſtances expedient or uſeful, on the contrary, the pains taken by the magiſtrates of Marſeilles, though not abſolutely ſucceſsful in extinguiſhing the plague, were certainly a check on its ſpreading.

The cleanſing and expurgation of particular houſes which the diſtemper has deſolated, where it can be done, will hardly be denied to be expedient: but where a city is of large extent, or has been ſo dreadfully viſited as Marſeilles was, a complete univerſal purification would ſeem in the nature of things to be impracticable. The method purſued at Marſeilles appears to have been judiciouſly concerted, and was of ſome ſervice: that it proved not completely ſucceſsful, was owing to the impoſſibility of carrying it into execution in its full extent. This, I think, is evident from the Memoirs referred to below[1].

But that the regulations for expurgation cannot be effectually carried into execution in all ſituations, is no reaſon for rejecting them where obſtacles do not intervene. The propriety of ſeparating the ſound from the infected, has ſeldom been diſputed; repeated experience confirms its utility in the only periods in great plagues when it can effectually take place, that is, in their beginning and their decline; the anarchy prevalent at other

[1] Traité de la Peſte, p. ii. p. 157, 160, 169.

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times, preventing the ſalutary practice from being attempted, or confining it within narrow bounds: but in all inſtances it has been attended with advantage. In like manner, a partial purification may prove the means of protecting not only particular houſes, but ſtreets or pariſhes, where a general one cannot be undertaken with probability of ſucceſs.

The plague, after its ceſſation at Marſeilles in July, 1721, reappeared there about the beginning of May, in the following year; but the vigilance of the police prevented the diſtemper from making any conſiderable progreſs, inſomuch that publick tranquillity appears to have been reſtored before the middle of July[2].

The return of the diſtemper in 1722, was by ſome imputed to the latent remains of contagion which had eluded the general expurgation in the preceding year; but more commonly was aſcribed to infection recently imported from Avignon, in ſmuggled goods[3]. The former opinion was at one time ſo prevalent as to bring it under deliberation, whether a ſecond general expurgation was not requiſite for the ſecurity of the city, and the reſtoration of its commerce. An aſſembly for this purpoſe was held the 9th of July, 1722, the reſult of which was a memorial from the deputies of the Chamber of Commerce, and the principal merchants, ſtating ſo clearly the unneceſſarineſs, the inconveniency, and, in ſeveral reſpects, the impoſſibility of carrying ſuch a meaſure into execution, without extreme prejudice to the commercial world, that it was entirely relinquiſhed[4].

The memorial drawn up on this occaſion enters into a detail of the inevitable difficulties attending a general quarantine and expurgation of the city; and ſhows that before the year 1721, ſuch a practice had never been known at Marſeilles, it being a new cuſtom, unknown to all other towns of Europe. "Il eſt ſans

[2] See Traité de la Peſte, p. ii. p. 210, 235, 236.

[3] Traité de la Peſte, p. ii. p. 235.

[4] Traité de la Peſte, p. 220.

" exemple que dans aucun temps, & en aucun pays, l'on ai fait CHAP. VI.
" des déſinfections générales après la ceſſation de la Peſte. Lorſ-
" qu'elle s'eſt gliſſée dans les pays policés d'Europe, l'on a fait
" comme à Marſeille, des quarantaines & des parfums dans les
" Villes & Maiſons qu'elle a attaqueés; les precautions actuelles
" de ces parfums, le grand air, le decroiſſement du mal, qui
" s'affoiblit de lui même, & le temps enfin, ont rétabli la ſanté
" dans ces endroits. La Peſte a été pluſieurs fois en Angleterre,
" Eſpagne, Italie, & en France, & elle n'y a ceſſé que comme l'on
" vient de dire. L'on ne trouve pas qu'en diverſes occaſions,
" ſurtout la derniere fois qu'elle fut a Marſeille, il ait été fait
" une deſinfection générale pour la faire ceſſer ..... Aix, Tou-
" lon, Arles & pluſieurs autres Villes, & lieux de Provence, qui
" ont eu le même malheur dans les anciens temps, & même en
" l'annee, 1720, n'ont pas fait autrement que Marſeille, qui leur
" a ſervi d'exemple[5]."

2d. Is the ceſſation of the plague at Marſeilles in 1721, to be aſcribed to the means employed by the magiſtrates; to an alteration in the ſtate of the air; or to both jointly?

It has before been repeatedly remarked, that a change in the conſtitution of the air muſt be admitted as the principal cauſe of the ceſſation of the peſtilence. This change is ſometimes ſo ſudden and complete that the diſtemper declines rapidly, and vaniſhes in a ſhort while; at other times it is more gradual, and the diſtemper lingers in a low degree. In the former caſe the exertions of police become leſs neceſſary, or ſuperfluous; in the latter they are of evident utility, and more practicable. In this view they were of ſervice at Marſeilles in 1721 and 1722[6].

3d. Where the peſtilential conſtitution of the air is protracted for a courſe of ſucceſſive years, is it probable a general purification of the city, when the diſtemper ſubſides in the winter, would

[5] Traité ut ſupra, p. ii. p. 225.
[6] Traité ut ſupra, p. i. p. 150, 153. p. ii. p. 236.

pre-

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prevent its reviving in the ſubſequent years: as for example, at Aleppo in 1760, might not a general expurgation in the autumn, with proper precautions in the enſuing ſpring, have probably prevented the ſucceeding havock in the two following years?

In reſpect to this query, which is purely hypothetical, I think the probability may be admitted, if effectual purification of infected houſes and ſuſpected goods had been made in the autumn and winter of 1760; if communication with the maritime and other towns had been prevented; and if perſons immediately when taken ill had been ſeparated, with the uſual precautions. I ſay, it is probable that the progreſs of the diſtemper might have been ſtopped, or, at leaſt, the ſubſequent mortality leſſened; eſpecially as the diſpoſition of the air was in a leſs degree peſtilential in 1761, than in the year following. But I doubt whether any human means whatever, in the winter of 1761, would have much availed in averting the misfortunes of 1762; the peſtiferous fomites had in the preceding ſummer been too widely diſperſed, and the conſtitution of the air was more intenſely than ever diſpoſed to propagate the infection.

Notwithſtanding theſe unfavourable circumſtances in 1762, perſons who ſhut up in due time, and with the ordinary precautions, remained unhurt. Even in houſes which had been infected the year before, I have known families ſhut up with the ſame ſucceſs, though the houſes had not been purified by fumigation, but only aired, and the bedding, &c. of the ſick either ſold or deſtroyed: they were conſidered however to be more ſecure where fumigation had been employed. There appears no reaſon why the ſame means that preſerved ten houſes, ſhould not have preſerved ten hundred, and conſequently a whole city, were it poſſible to employ them univerſally.

The numberleſs obſtacles to their application through all quarters of a large commercial town, after the ravage of a ſevere peſtilence, leave little hopes of its extinction by means of the police,

police, without the concurrence of a favourable change in the ſtate of the air; but a due exertion of thoſe precautions will ſerve to reſtrain its progreſs, and their application will be attended with advantages, in proportion as the regulations are extended and exactly obſerved. Several inſtances occurred at Aleppo, of the plague reviving in 1762, in houſes which had ſuffered the year before, attended with circumſtances highly ſuſpicious of the contagion having been preſerved ſeveral months, through neglect in cleanſing; and I met with many inſtances of the diſeaſe being communicated by coverlids, carpets, and apparel, purchaſed from infected houſes. The precaution of European police may ſometimes be unneceſſary or ſuperfluous; the Turkiſh negligence, in that reſpect, is very often productive of viſible ill effects[7]. CHAP. VI.

4th. To what cauſe is the almoſt uninterrupted exiſtence of the plague in London, in the laſt century, to be aſcribed? how far may its long continuance, at one time nine, and at another thirteen years, reaſonably be imputed to the neglect of a proper police? and were the more memorable plague years produced by foreign contagion imported from other countries, or by miaſmata latent in ſubſtances not purified, and brought into action by the return of a peſtilential conſtitution?

In the London bills of mortality from the year 1603 to 1679, four or five years only are found free from the plague. But in the interval between 1611 and the great plague of 1625, of thirteen years, in three only the number of peſtilential burials exceed twenty; in others, are found ſix or nine; and the largeſt number is ſixty-four, that is, in 1612, the year immediately ſucceeding the laſt of the plague of 1603. From 1626 to 1630, in one of the three years no peſtilential burials are found in the bills; in the two others three or four only. In a ſucceeding interval of four years, two appear free from the plague; in the third eight burials are found, and in the fourth, one. From 1648, when

[7] Alpinus de Medicin. Ægypt. lib. 1. cap. 15.

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the great plague of 1636 is ſaid to have terminated, to 1662, an interval of fourteen years, in the firſt the burials amount to ſixty-ſeven, but in two only of the others exceed twenty; and in the remainder, are reduced to ſixteen, fourteen, ſix, or four, annually.

In years wherein three or four burials only are aſcribed to the plague, and even where they amount to thirty or forty, I think it highly probable the ſearchers miſtook the diſeaſe; or that the pariſh clerks put down a number at random in the column. It is much more probable that other eruptions ſhould be miſtaken for peſtilential, than that the true plague, attended with unequivocal ſymptoms, ſhould ſhow itſelf in three or four, or a ſcore of inſtances without further conſequence, in the ſucceſſion of ſeaſons of ſeveral years. When we find ſixty-four perſons died in 1612, two hundred and ſeventy-four in 1631, and ſixty-ſeven in 1649, being the years immediately following great plagues, the mortality may be conceived owing to the lingering remains of contagion; but when the number of burials in the next yearly bill is found reduced to ſixteen, fifteen, or eight[8], I cannot help ſuſpecting a miſtake in naming the diſeaſe; at leaſt, better authority is requiſite for the true plague's exiſtence in ſo reduced a ſtate, for a length of time, than the teſtimony of inaccurate bills of mortality.

Conſiſtently with the above ſuſpicion of miſtake (which is merely conjectural) I think it probable the plagues of London terminated completely in 1612, in 1626, in 1631, and in 1649; and finding in the years immediately preceding the plague years 1603, 1625, 1630, 1636, and 1665, that the bills either mention no peſtilential funerals, or a very inconſiderable number, I think further, it may reaſonably be inferred, that the frequent returns of the plague are rather to be aſcribed to foreign contagion im-

[8] Graunt.

ported,

ported, than to what might be ſuppoſed impriſoned in unventilated fomites remaining in the city. CHAP. VI.

In the long continuance of the plagues of 1603 and 1636, it becomes difficult to determine whether they were kept up by the ſucceſſive propagation of the firſt infection, or recruited by foreign ſupplies. In the third year of that of 1603, and in the third and fourth of that of 1636, the annual burials were reduced to three or four hundred, but increaſed again in the ſubſequent years. Though it cannot be aſſerted, that no freſh infection was then imported, yet, conſidering the few precautions taken in thoſe times to prevent it, there is no neceſſity for ſuppoſing ſuch importation. When once the plague is introduced into a place, it continues as long as the peſtilential conſtitution laſts, raging with more or leſs ſeverity according as the conſtitution happens to favour its propagation; upon a change of that conſtitution the diſtemper ceaſes to be epidemical, and gradually vaniſhes.

The return of the plague at certain intervals, implies the return of the peſtilential conſtitution, which is not however reckoned ſufficient to produce the true plague in Europe, without the concurrence of contagious miaſmata, either recently imported, or exiſting before in the place, and now excited by a certain undefined ſtate of the air[9].

Sydenham after remarking, with gratitude to the Divine Mercy, that the peſtilential conſtitution of the air in Britain returns at long intervals, not above once in thirty or forty years, proceeds in the following manner: "Quæ per annos aliquot peſtem inſig-

[9] "Interea, aeris diſpoſitionem quantumvis λοιμώδη Peſti ſuſcitandæ per ſe imparem eſſe vehementer ſuſpicor; quin peſtilentiæ morbum alicubi ſemper ſuperſtitem aut per fomitem, aut per peſtiferi alicujus appulſum, e locis infectis in alios deferri; ibidemque, non niſi accedente ſimul idonea aeris diatheſi, popularem fieri." Syd. Oper. ſect. ii. cap. ii. p. 103.

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" niorem ſubſequentes, ſparſim occurrunt peſtiferorum funera,
" paulatim imminui ac evanceſcere ſolita, peſtilenti aeris diatheſi
" etiamnum ex parte perſeveranti, nec dum in aliam ſalubriorem
" penitus immutatæ attribuenda ſunt, quippe quæ antegreſſæ
" meſſis duntaxat ſpicilegia reputari debeant[10]."

I cannot here avoid taking notice of what Dr. Mead has ſaid on the periodical return of the plague in Britain. In the firſt edition of his book, he ſays, he does not think there is any inſtance of a peſtilential diſeaſe, of great conſequence, in Britain, which was not brought from other infected places; and adds, " this I the rather mention becauſe it is a common opinion, and " propagated by authors of great name, that we are uſually " viſited with the plague once in thirty or forty years; which is " a mere fancy without any foundation either in reaſon or expe- " rience[11]." In the eighth edition he is ſtill more explicit, but in place of uſually viſited, has altered it to " *neceſſarily* viſited." " Since the ill qualities of the air in theſe northern countries " are not alone ſufficient to excite the plague without imported " contagion, this ſhews the error of a common opinion, coun- " tenanced by authors of great name, that we are *neceſſarily* viſited " with the plague once in thirty or forty years[12]."

In the firſt edition no reference is made to particular authors; in the eighth, reference is made to Sydenham's chapter on the plague: but in that I find no aſſertion " that we are neceſſarily " viſited with the plague once in thirty or forty years." Sydenham's own words can ſurely never admit of ſuch conſtruction. He remarks, that the conſtitution of the air neceſſary to render the true plague epidemical, providentially happens ſeldom. " Unde " fit quod hunc orbem noſtrum Britannicum peſtis vix fre- " quentius quam poſt annorum circiter triginta, vel quadraginta,

[10] Sydenham Oper. ſect. ii. cap. ii. p. 107.
[11] Mead, p. 5.
[12] P. 61.

 intervalla,

" intervalla, ſummo ſcilicet perniciei vigore, ac tota furiarum " acie, adoriatur" (p. 107). There is ſurely nothing here of the *neceſſary* return of the plague at certain periods; and were even peſtilential diſpoſitions of the air, (Aeris Conſtitutiones λοιμώδεις) to return periodically, they would not, according to Sydenham, be neceſſarily accompanied with the plague; for he has explicitly given his opinion, that the diſpoſition of the air, however peſtilential, could not of itſelf, without the concurrence of miaſmata, retained in a fomes, or imported from other places, produce the plague[13]. CHAP. VI.

This laſt opinion is exactly what was adopted by Doctor Mead himſelf; it is therefore ſtrange he ſhould impute to Sydenham, who held the ſame opinion of contagion, the giving countenance to a doctrine founded on mere fancy, without foundation either in reaſon or experience, and which betrayed the people into vain fears[14]. He adds, " Since the peſtilence is never originally bred " with us, but always brought accidentally from abroad, its " coming can have no relation to any certain period of time." This is undoubtedly true, if by coming of the peſtilence be meant merely its importation. But if any place, which ſeems particularly to be the caſe with Aleppo, be liable to periodical returns of the peſtilential conſtitution, and have frequent intercourſe with infected places, the plague may there become a periodical diſtemper, though at unequal intervals: if imported contagion happen not to concur with the diſpoſition of the air, the place for that time will eſcape.

Doctor Mead, ſtill in alluſion to Sydenham, obſerves, " Al- " though our three or four laſt plagues have fallen out within " a century, yet that is too ſhort a compaſs of years to be a " foundation for a general rule. Accordingly we ſee the laſt

[13] Sydenham Oper. ſect. 2. cap. ii. p. 109.
[14] Mead, p. 62.

BOOK III. " fifty-ſix years have paſt over without any calamity of this " kind[15]."

I have already ſhown, that the notion of a neceſſary periodical return of the plague, which the Doctor here combats, has been unjuſtly imputed to Sydenham; and it may be remarked, that his laſt obſervation affords a very ſlender argument againſt the periodical diſtant returns of the peſtilential conſtitution. Fifty-ſix years affords time only for the return twice of ſuch a conſtitution, and it is only to ſuppoſe that at ſuch periods, imported infection happened not to concur: a ſuppoſition not unreaſonable, conſidering the ſtricter precautions againſt the plague, employed in latter than in former times.

Doctor Mead allows that the three or four laſt plagues have fallen out within the century; but it may be remarked, that the periods of their return, by no means agree with the periods hinted at by Sydenham. The years 1592, 1593, 1603, 1625, 1636, and 1665 were great plague years, according to the bills of mortality: but excepting the interval between 1636 and 1665, all of them were ſhorter than thirty years. The plagues in England, as collected by Gotwald are the following[16].

The 14th century, 1348, 1361, 1369, 1379, 1391.
The 15th century, 1407, 1478.
The 16th century, 1500, 1513, 1543, 1548, 1563, 1594 (1592).

As Gotwald has not thought fit to add his authorities, I know not how far he is to be depended on.

It was objected by one of Mead's opponents in 1721, that " Experience is of the ſide of the terrible, but common opinion, " that we are viſited by the plague once in thirty or forty years."

[15] Mead, p. 62.
[16] Hiſtorical Account of the Plague, 1743, Lond.

To which it was replied by a perſon who at the time wrote in defence of Mead, "We have no knowledge of this being ſo, "in the earlieſt times, before we had communication with Africa, "and the Eaſt; either immediately by ourſelves, or by the means "of our neighbours [17]." CHAP. VI.

But whatever it may have been in the earlieſt times, it would be of ſervice to have an exact chronicle for four hundred years preceding the year 1600, diſtinguiſhing the true plague from other mortal epidemic diſeaſes. I have been led into this digreſſion, partly from a motive of vindicating Sydenham from what I conceive to have been aſcribed to him from inadvertence, and, at the ſame time to point out a deſideratum in the hiſtory of the plague, which might, perhaps, be eaſily ſupplied.

What length of time the peſtiferous miaſmata may be preſerved in an active ſtate, in ſubſtances to which they adhere, is not known. The interval between the plagues of 1625 and 1630 was ſo ſhort, that the latter may be ſuppoſed owing to contagion retained in fomites ſince the year 1726; but ſeeing the bills of mortality for 1629 contain no peſtilential burials, and make mention only of ſeven in the two preceding years, it is more probable, for reaſons before aſſigned, that the plague of 1630 took its origin, like the others, from foreign contagion.

Experience in Syria is againſt the notion of peſtiferous miaſmata being retained long in apparel, furniture, and other things liable in common uſe to ventilation. In the intervals between the plagues of Aleppo, the city remains abſolutely free. Fevers indeed are ſometimes met with, attended with ſwelling of the parotid glands, which, when a peſtilence has been predicted by the aſtrologers, or the ſuppoſed term of the periodical return of the plague approaches, occaſion tranſient alarm; but perſons practiſed in the plague are able to diſtinguiſh the difference in the

[17] Some Remarks on Three Treatiſes, p. 23.

con-

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concomitant ſymptoms. The plague is never ſporadic there, except in its beginning and decline; in the firſt caſe it ſoon becomes epidemical, in the latter it is no more than the epidemic tending to its termination: it never ſubſiſts for any length of time in a few ſcattered inſtances, without conſequence. This alſo increaſes my ſuſpicion, that the true plague did not continue uninterruptedly at London, in the laſt century, as repreſented in the bills of mortality.

Whether its continuance in a far leſs ambiguous ſtate, from the year 1603 to 1612, and from 1636 to 1649, can be imputed to the neglect of precautions ſimilar to thoſe practiſed at Marſeilles, is a point on which a more critical review of the bills of mortality and the domeſtic annals of the times, than it is at preſent in my power to attempt, would throw conſiderable light.

A general quarantine, and purification of ſo extenſive a city as London, I conceive to have been impracticable at the end of the years 1603, 1625, and 1636, when almoſt every pariſh had been infected. But in the years 1604 and 605, when the burials were reduced to one thouſand, and in 1638 and 1639, when reduced to leſs than half that number, the expurgation of houſes, and a ſpeedy ſeparation of the ſick from the ſound, might, at leaſt in ſome degree, have been effected; and might probably have prevented ſo great an increaſe of mortality in the ſubſequent years. But this is all along upon a ſuppoſition of the plague being kept up by contagious matter already in the town; for when there is a chance alſo of ſupplies being brought from other places, all internal police, while the peſtilential conſtitution laſts, will be ineffectual, without a ſtop being put to foreign intercourſe: as was apparent from what happened at Marſeilles in 1722.

CHAP. VII.

Recapitulation—Infection by immediate contact—Through the medium of the air—By a fomes—The plague not equally contagious in all ſtages of the peſtilential ſeaſon—Various properties of contagion—Popular dread of infection, &c.

IN treating of contagion, I have all along purpoſely avoided diſquiſitions into the ſpecific nature of the ſuppoſed peſtilential miaſmata, and the inviſible manner of their operation on the fluids or ſolids of the human frame. Various theories propoſed on this ſubject derive much from ingenious fancy, but very little from direct experiment: or general concluſions have been too haſtily drawn from a few experiments, and analogical reaſoning has been much too freely indulged. The properties of contagion are only to be collected from their viſible effects; ſo far as theſe are aſcertained, no further, our knowledge can be ſaid to extend.

In the foregoing chapters, I have endeavoured to ſhow the various ſenſes in which the term contagion has been uſed. In a review of the laſt memorable plague at Marſeilles, I have attempted to trace the progreſs of its contagion, and have produced ſuch inſtances as might ſerve to mark its viſible properties; collecting ſimilar inſtances occaſionally from other countries by way of elucidation. I have fairly ſtated the principal objections made to the commonly received opinion on peſtilential contagion, ſo far as they went upon facts, and have endeavoured to refute them, by an impartial examination of the facts produced in their ſupport. Laſtly, in reſpect to the concluſions drawn from the hiſtory of the plague at Marſeilles, I have always ſubjoined, what appeared to me the ſtrongeſt arguments brought againſt them, either in the expreſs words of the author, or, if in abſtract, it was always my intention to ſtate them ſcrupulouſly in their full force.

Theſe

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Theſe various matters, leading further than was at firſt intended, have engaged me inſenſibly in digreſſions, and ſometimes into criticiſm on certain writers. I ſhall therefore dedicate this chapter to ſome remarks on the principal properties of contagion; collecting part of what has been ſcattered in the foregoing pages, and placing the whole together in a more connected view, unmixed with controverſy.

The plague is a contagious diſeaſe; that is, an emanation from a body diſeaſed, paſſing into one which is ſound, produces, in time, the ſame diſeaſe; and the perſon thus infected becomes in like manner capable of communicating the plague to others.

This emanation is received either by immediate contact with a diſeaſed body; or at ſome diſtance, through the medium of the air; or from ſubſtances which having imbibed the peſtiferous miaſmata, are capable of retaining them in an active ſtate, and occaſionally of communicating them, by contact or otherwiſe, not leſs malignant in power than when they iſſue from the original ſource. In which ever of theſe modes the emanation finds acceſs into a ſound body, the perſon ſo infected is ſaid to be infected by contagion. The ſchools have conferred on each mode a diſtinct name.

The firſt mode of contagion is by immediate contact with a diſeaſed body. It is an undoubted fact, that the plague is thus communicated, but it is not ſo certain, what particular ſtage of the diſeaſe is the moſt infectious.

I have had occaſion to remark before, that in the early period of a peſtilence, when the moſt fatal forms of the diſeaſe are prevalent, the aſſiſtants often eſcape unhurt. They do not however always eſcape; and I have known ſome who, to all appearance, muſt have contracted the infection on the firſt or ſecond day of the ſickneſs: judging from their never having afterwards approached

proached the ſick, or been otherwiſe expoſed to contagion. When the diſtemper is ſpread univerſally, it is difficult to aſcertain caſes of this kind; becauſe it is often impoſſible to know, amid ſo many ſources of infection, when or where the taint was caught: but, ſo far as I could diſtinguiſh, in the advance of the ſeaſon, every ſtage of the diſeaſe was infectious; for in the various ſtages perſons who entered the chambers of the ſick, ſome ſooner, ſome later, were infected. CHAP. VII.

It is probable, however, that the danger incurred by approach to the ſick is leſs in the firſt ſtate than it becomes afterwards, though the diſeaſe itſelf may be no leſs contagious. In the progreſs of the diſeaſe, the bedding, the clothes of the ſick, and furniture of the chamber, may be ſuppoſed daily more and more impregnated with peſtiferous effluvia; ſo that perſons are often infected by barely entering the infected chamber, without touching the diſeaſed perſon. Hence the dreadful havock made by the plague in the ſmall houſes of the poor, who are deſtitute of the means of cleanlineſs, and remain ſeveral days without ſhifting the clothes in which they uſually ſleep.

Among people of condition, who ſleep in airy chambers, and where ſtrict attention is paid to cleanlineſs, the danger of infection is certainly leſſened. In ſuch families the diſtemper makes incomparably leſs havock; but thoſe more conſtantly about the ſick are nevertheleſs often infected, and then probably by immediate contact.

Doctor Mead was of opinion, that, with due cautions, attendance on the ſick, when lodged in clean and airy habitations, would be attended with no great danger[s]. This I underſtand as including medical attendants. But as thoſe are to be ſuppoſed always to touch the ſick, I can by no means conceive their riſk to

[s] Mead on the Plague, p. 100.

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be inconſiderable, in the moſt favourable ſituations, though it no doubt is leſs than in the confined dwellings of the poor.

The ſecond mode of contagion is by the medium of the air. The effluvia ariſing from the diſeaſed, received into the ambient air, form a peſtiferous atmoſphere, more or leſs impregnated with theſe effluvia, as it recedes from their ſource. That contagion is thus communicated in the chambers of the ſick, appears from perſons being infected without touching the diſeaſed body, or any thing in the room that may be ſuppoſed to harbour infection.

To what diſtance the tainted atmoſphere extends, is not yet known; but ſeveral facts render it probable that the effluvia, when once tranſmitted into the air, are ſoon diſperſed, blended with the common maſs, or otherwiſe ſuffer ſuch alteration as renders them innocuous at no great diſtance from their ſource. It is probable alſo that theſe effluvia ariſe, in an active ſtate, to no great height in the common atmoſphere. The ſecurity of perſons in an infected city, who, by being regularly ſhut up, avoid all communication, ſeems to be in favour of theſe conjectures[z].

The third mode of contagion is by ſubſtances which having imbibed the peſtiferous effluvia, are capable of retaining them in an active ſtate for ſome time; whence iſſuing again, a ſound perſon within their ſphere of action, or by contact, receives the infection in the ſame force as from the original ſource.

This contagion *per fomitem*, as it is termed, is of more extenſive influence than either of the other two: the diſtemper is not only ſpread in all quarters of a town, but tranſported to great diſtances, from one region to another.

[z] See Book 1. chap. vi.

I have

CHAP. VII.

I have already mentioned the plague at Aleppo being conveyed into different ſtreets, remote from one another, by the Jewiſh ſaleſmen; and I have known ſeveral inſtances, in the ſpring, of Armenian waſher-women infected by tainted linen.

In 1762, inſtances were met with of the plague being introduced to families that had been ſhut up ſix weeks, by the fraudulent reception of tainted articles, or neglect of regulations. An accident in the Jeſuit Convent was owing to the latter cauſe[3]. In 1743, an Engliſh gentleman, during confinement, was infected by linen imprudently taken in from his laundreſs[4].

In the advance of the plague, the riſk of concourſe in the ſtreets, in the bazars, or at the bagnio, ariſes perhaps as much from the clothes of thoſe who frequent infected houſes, as from the perſons of convaleſcents who mingle in the crowd, and of ſuch as in the beginning of their ſickneſs, are able to walk about; for in crowding through the narrow bazars, people remain long in the preſs together. The proveditores employed by the families ſhut up, frequently convey the plague into their own houſes, ſometime before they themſelves are taken ill. I have known inſtances of a like kind in families of the native ſurgeons, whoſe ſhops are at a diſtance from their houſes. A perſon employed by me to bring intelligence, and occaſionally to viſit infected houſes, communicated the plague to his wife, but remained himſelf well all the time.

It is in this manner recent contagion is propagated in a large city, or conveyed from town to town not far diſtant; but when the infectious miaſmata happen to adhere to ſubſtances not expoſed to ventilation, or to merchandiſe which is ſoon cloſe packed up, they retain their vigour unimpaired for a long while; and in that ſtate are tranſported to other countries. How long they

[3] See Book 1. chap. vi.

[4] Natural Hiſtory of Aleppo.

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may thus be preſerved impriſoned, in the ſame climate; how far they are effected by length of voyage, through various climates, are circumſtances not hitherto aſcertained.

That they retain their activity in a three months voyage from the coaſt of Syria to Marſeilles, has been ſhown before in another place. What probability there is of their being diveſted of it in colder climates, will come more properly under conſideration in the following book: in which I ſhall alſo have an opportunity of explaining ſome of the various ways that merchandiſe may contract infection in the Levant; and alſo of detecting ſeveral errors or miſrepreſentations, reſpecting the practice of that country in times of peſtilence.

The plague, though a contagious diſeaſe, is not equally contagious in every period of the peſtilential ſeaſon. In the beginning, thoſe frequenting the ſick often eſcape unhurt, or one only out of ſeveral is infected. Of this the Journals afford ſeveral inſtances[5]. The eſcape of perſons employed about the ſick, proves a frequent cauſe of miſleading the popular opinion of the diſeaſe, and has in many inſtances occaſioned much miſchief, by encouraging the neglect of due precautions till too late.

The progreſs of the plague in the Keiſaria at Aleppo in March, 1761, is a proof of high contagion in an early period[6], and examples of a ſimilar kind were met with in ſome of the adjacent villages, early in the ſpring, as well as in the winter: owing, perhaps, to the ſmall, cloſe, crowded dwellings of the inhabitants, to which the air often has no other acceſs than by a narrow low door. To this cauſe alone I ſhould have always aſcribed the difference in the mortality commonly remarked, had I not ſeen infected houſes, ſeemingly the ſame as to ſituation, airineſs, and other circumſtances, ſuffering very unequally in degree; in

[5] Appendix, Caſe III. XII. XIV. XV. XVI. XXIV.

[6] See Book 1. chap. v.

ſome,

ſome, few or none of the attendants being infected, in others, few eſcaping unhurt. CHAP. VII.

In general, however, the contagion ſpreads much ſlower in the beginning of the ſeaſon than in its advance: the inſtances juſt mentioned are to be conſidered as exceptions to a general remark, which appears to have held true in moſt plagues. But difference in the ſpread of contagion, under circumſtances ſeemingly the ſame, is not confined to the beginning of the ſeaſon, being obſerved through all its ſtages: it is true, a much greater number of thoſe converſant with the ſick, are infected in the advanced ſeaſon; yet ſtill there is an unaccountable variation; and ſome expoſed every way to infection, as if invulnerable, remain ſound the whole ſeaſon.

The Journal affords ſome inſtances of perſons, who had expoſed themſelves two or three ſucceſſive ſeaſons, being attacked, at length, when the contagion was faſt on the decline, and the diſtemper had become, in all reſpects, milder[7].

Thoſe who thus long reſiſt infection, are commonly ſuppoſed to owe their eſcape to ſome peculiar power of conſtitution, enabling them to reſiſt the operation of the infectious effluvia; and when, at laſt, ſuch happen to fall a ſacrifice, it is aſcribed rather to an alteration in that undefined idioſyncracy, than to increaſe of intenſeneſs in the contagious property of the diſeaſe.

Could this idioſyncracy be diſcovered by human ſagacity, the perſon poſſeſt of it might, in the times of peſtilence, walk about with as little apprehenſion, as one who has had the ſmall-pox walks the crowded wards of a ſmall-pox hoſpital. But like the peſtilential conſtitution of the air, its preſence or abſence cannot be diſcovered. It does not ſeem to depend on the viſible varieties of habits and temperaments; it is found in both ſexes; in all

[7] Book 1. chap. vi.

ages,

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ages; the ſound and morbid poſſeſs it indiſcriminately; and, like the conſtitution of the air, it is alſo ſubject to change.

It is the remark of a very accurate obſervator, in treating of malignant contagious fevers, that a perſon is often immediately ſenſible of his having received an infection from its firſt attack; but that many are not ſenſible of this at firſt[8]. The latter part of this remark is the moſt applicable to the plague; for I never met with any inſtance of a perſon being ſenſible of the ſtroke at the moment of infection. The ſmell iſſuing from the ſick in the plague, in thoſe who were kept perfectly neat, was much leſs perceptible, than in the ſick during the eruptive fever of the ſmall-pox, or in ordinary petechial fevers. In the lower claſſes, where neatneſs is not to be expected, the ſmell of the ſick chamber was highly offenſive, and ſometimes produced head-achs and giddineſs. I have myſelf been ſenſible of theſe ſymptoms upon coming out from the ſordid dwellings of the poor. But the ſmell was not ſpecifically diſtinguiſhed, like that of the ſmall-pox, it was the common mephitical ſtench perceptible in all cloſe crowded chambers in that country, in every diſtemper; ſomewhat reſembling the ſcent retained in the clothes of priſoners long confined in jails.

Though, ſo far as I had occaſion to remark, perſons be not ſenſible, at the inſtant, of contracting the infection, its effects, for the moſt part become ſoon perceptible; in ſome within a few hours, in others within one, two, three, four days, or more: but on this point I ſpeak from narrow experience, it being ſeldom that one can form a probable gueſs. In the beginning of a peſtilence, when the ſick are very few, a perſon, not otherwiſe expoſed, who happens to be taken ill within a few hours after viſiting in an infected chamber, may be ſuppoſed to have there contracted the diſtemper. Of this I have known ſeveral examples; as I have of others taken ill after two, three, or more days. But

[8] Lind's Diſſertation on Fevers, p. 244.

when in the more advanced ſeaſon a perſon is taken ill in like manner, there being then many other ways of catching the infection, his ſeizure cannot with equal probability be pronounced a conſequence of ſuch an accidental viſit. CHAP. VII.

The difference in the time of the infection diſcovering itſelf, may proceed from the variety of conſtitutions; other cauſes may likewiſe co-operate. Intemperance, and certain affections of the mind, may not only prediſpoſe to the reception of the peſtiferous miaſmata, but, when received, may haſten their operation. I met with no inſtance of intemperance producing this effect, but think I have of the other. In caſes where the diſeaſe was not diſcovered to be the plague, till upon the eruption of buboes after two or three days, I have known ſeveral perſons who had, till then, without the leaſt ſuſpicion, frequented the ſick, ſtruck ſuddenly with a panic, and imagine themſelves ill. They felt ſhooting pains in their groins, confuſion in the head, and a loathing. Though in ſome theſe complaints were purely imaginary, and ſoon vaniſhed, in others they proved real; the ſymptoms increaſing, and being followed by eruptions. In ſuch caſes, I ſuſpected the latent infection to have been excited by terror.

How long the infection may remain inert in the habit, I apprehend to be a circumſtance not hitherto aſcertained. A quarantine of twenty-eight or thirty days is, at Marſeilles, deemed ſufficient for paſſengers from the Levant bringing foul patents; in which time it is conceived any latent taint muſt diſcover itſelf; and, being fumigated at the end of that term, together with their baggage, they are admitted to communication without further ſcruple. Experience here ſeems to fix a ſafe period; though, perhaps, the quarantine might be abridged in reſpect to paſſengers.

From what I obſerved at Aleppo, I was inclined to think the infection rarely remains latent beyond ten days: but wider experience is requiſite to determine a matter of ſo much conſequence.

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quence. The clothes, and other packed baggage of paſſengers, who, after a voyage from places infected, enter ſound into the Lazaretto, are more to be dreaded than their perſons. A paſſenger from the Levant, who was ſeized with the plague a few days after coming out of the Lazaretto of Marſeilles, moſt probably was infected either from his own baggage, or by other communication after his entering the town[9].

As I do not conceive the infection remains many days inert in the body, ſo when once its operation is announced by viſible ſigns of diſorder, its progreſs is always rapid; I never met with any inſtance where it hung ambiguouſly about a perſon more than two or three days. In this circumſtance it differs materially from certain malignant infections which are found ſometimes to continue about a perſon many days, nay weeks, diſcovering themſelves by irregular ſhiverings, previouſly to the complete formation of the diſeaſe[10].

As it is not preciſely known how ſoon a perſon infected becomes contagious, ſo neither is it known at what period the power of communicating the diſeaſe to others ceaſes in convaleſcents from the plague. Till ſuch time as future experience ſhall have eſtabliſhed ſome degree of certainty, it would ſeem prudent to ſuſpect all convaleſcents as long as any ſymptoms of diſorder remain perceptible; and more eſpecially with regard to ſuch in whom the buboes continue open[11]. Though a ſound perſon coming from an infected place, being ſtripped of his clothes, fumigated, and ſeparated from his baggage, might, perhaps, ſafely be admitted to pratique, after a ſhort quarantine; there being more to be apprehended from infection adhering to the things he brings along with him, than from his own perſon; the caſe is different with one recovering from the plague, who may carry

[9] Relat. Hiſt. p. 43, 73. Traité de la Peſte, p. ii. p. 198.
[10] Lind on Fevers, p. 245.
[11] Book 2. chap. vi.

within

ithin him the ſeeds of contagion, beyond the reach of all external means of purification. It is not improbable that in old ſinuous ulcers, conſequent to buboes, the matter diſcharged may loſe its contagious property before the healing of the ſore; but all open peſtilential ulcers ſhould be held infectious till after the expiration of two months from the firſt attack; and the patient ſhould be ſecluded accordingly. Prudence at leaſt ſeems to dictate this, till ſuch time as direct experiment ſhall have ſhown the precaution to be ſuperfluous. The deciſion, on this point, of the medical conſultation at Marſeilles, was grounded on a vague hypotheſis [12]. CHAP. VII.

The plague may attack the ſame perſon more than once, even in the ſame ſeaſon; but it has been already ſhown, that ſuch caſes are proportionally very rare [13]. Convaleſcents, in like manner, are much leſs prone to relapſe, in the plague, than in other malignant contagious fevers [14]. In the firſt circumſtance the plague differs from the ſmall-pox, which never attacks twice; in the ſecond, both diſeaſes agree, as convaleſcents in both recover very well in the wards of an hoſpital, without apparently being affected by the infectious atmoſphere, which few who have not before gone through the diſtemper, could breathe with ſafety.

Having in a ſummary manner recapitulated the principal properties of peſtilential contagion, ſo far as they ſeem eſtabliſhed in experience, I ſhall conclude with a few reflections on the dread almoſt univerſally entertained of that contagion.

Every nation that has experienced the calamities attending the plague, looks forward to its return with awful anxiety and apprehenſion. The fear of contracting a diſtemper inevitably mor-

[12] See before, book 2. chap. vi. p. 309

[13] Ibid. p. 314.

[14] Lind on Fevers, p. 245.

BOOK III.

tal, and of periſhing, deprived of the uſual conſolations in ordinary maladies, predominates ſo irreſiſtibly, as to diſſolve the ſocial ties of humanity; and often, in the poliſhed cities of Europe, produces ſcenes of horror, anarchy, and public diſorder, unknown in countries deemed leſs civilized.

To eradicate this fear by declaring the plague to be not contagious, and a diſeaſe eaſily cured[15], is a vain, and, in its conſequences, a deſtructive expedient. The common ſenſe of mankind revolts againſt propoſitions ſo inconſiſtent with the annals of hiſtory; or if, in the beginning of a peſtilence, the miſled populace ſhould become dupes to a wretched policy that flatters their wiſhes, the illuſion, as the ſeaſon advances, will ſoon vaniſh before the woful conviction of hourly experience.

But though the dread of contagion neither can, nor ought to be eradicated from the minds of men, it may, conſiſtently with truth, be moderated; and reduced within bounds equally ſubſervient to the ſecuring ſubmiſſion to regulations calculated for the general ſafety, and to the encouragement of thoſe called upon by their ſtations to expoſe themſelves to danger, in the public ſervice.

That all thoſe expoſed to the contagion do not contract it; and that all thoſe who are infected do not die; are poſitions perfectly compatible with that of the plague being a very contagious and mortal diſeaſe.

The diſtreſs of Marſeilles during the height of the plague in 1720, the accumulation of difficulties with which the magiſtrates had to contend, a great part of that time, were, perhaps, never exceeded in any city of Chriſtendom. Yet many of the inhabitants of Marſeilles eſcaped infection; and the proportion would

[15] Journal of the Plague at Marſeilles, p. 56.

have

have been greater, had it been practicable, in the city, to have proſecuted exactly the ſame meaſures which were attended with ſuch marked ſucceſs on board the gallies[16].

London and other large cities afford inſtances of great numbers of the inhabitants, even of thoſe who remained all the time in town, having eſcaped the infection: it was a very conſiderable plague in which one-third were infected. At Marſeilles a larger proportion ſuffered, owing partly to neglect on the part of the police in the beginning, and to a complication of other cauſes, which, in the ſequel, involved the city in anarchy, and dreadful diſtreſſes of every kind.

But not only many of thoſe purſuing their ordinary courſe of life eſcaped the plague; but a certain proportion alſo of thoſe more dangerouſly employed about the ſick remained unhurt, as has been repeatedly ſhown in the foregoing pages.

As all are not equally ſuſceptible of contagion, ſo, of the infected, many eſcape not merely with life, but, comparatively with ſeveral ordinary diſtempers, ſuffer very little in the courſe of the diſeaſe. A conſiderable proportion of thoſe who recover were but ſlightly diſordered[17].

The approach of a peſtilence ought to arouſe to vigilance, not plunge us in deſpondence. Timely precaution may debar its acceſs, or, failing in that, may alleviate its attendant evils, and reſtrain its devaſtation. It cannot become epidemical without the concurrence of a certain ſtate of air, which may happen to be remote. Many eſcape infection in ſeaſons the moſt favourable to

[16] In the gallies and arſenal at Marſeilles there were about ten thouſand perſons, of which twelve hundred only were infected, and of thoſe one half recovered This ſeems to have been juſtly aſcribed to the wiſe regulations early eſtabliſhed, and rigorouſly maintained all the time. Relation Hiſtorique, p. 68.

[17] See book 2. chap. iii.

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its propagation; and ſo far is the diſeaſe from being infallibly mortal, that, upon the whole, a conſiderable proportion of the infected recover.

Theſe I conſider as conſolatory facts, confirmed by experience; and which may fitly be oppoſed to the popular notions of contagion, ſo apt to invade the imagination in moments of ſurprize and diſmay. They may contribute to animate thoſe who, by their ſtations, are called forth to expoſe their lives for the public welfare; but ought never to be miſapplied in encouraging a wanton temerity, or to countenance the neglect of human precautions.

A peſtilential ſtate of the air, diſcoverable alone in its effects, cannot be foretold; and a conſtitutional prediſpoſition to admit or to reſiſt infection, is accompanied with no conſciouſneſs in the poſſeſſor.

In this dark uncertainty the conduct of the magiſtrate ought to be regulated on the ſuppoſition that the peſtilential ſeaſon is impendent; the private individual ought not too confidently to reckon himſelf conſtitutionally exempt from infection. Both may indeed happen to be miſtaken, and the precautions of both may prove ſuperfluous; but where the public and private ſafety are ſo intimately concerned, preſervative meaſures are juſtifiable, though grounded on ſimple probability: if deferred till doubt be turned into conviction, they will come too late.

As no one can wiſely preſume that he himſelf, or his family, are conſtitutionally unſuſceptible of infection, it becomes the duty of all to concur with the magiſtrate, by a ready and unreſerved ſubmiſſion to ſuch regulations as the Council of Health may judge beſt for the general ſafety. A good citizen will conſider the various inconveniencies attending them, as a common misfortune, inſeparable from the condition of the times; and will

conſole

conſole himſelf with the reflection of their ſhort duration, ſhould that alter. Should they prove to have been unneceſſary, it will be an agreeable diſappointment: on another ſuppoſition, they may become the means of preventing inconveniencies of more moment, of obviating the neceſſity of much more ſevere reſtrictions, and perhaps of ſaving a populous city from extreme miſery, and irreparable devaſtation.

A

TREATISE

OF THE

PLAGUE.

BOOK IV.

Of Quarantines.

CHAP. I.

CHAP. I.

Misrepresentations relative to the Levant—Europeans in Turkey not exempt from infection—They use precautions for their preservation—Some objections to the plague being conveyed in merchandise considered.

THAT the plague is a disease highly contagious, and in what manner its contagion is propagated, have been fully shown in the foregoing book. The methods that have been proposed for the preservation of mankind against that contagion, are next to be considered, and fall naturally under the three following heads. Regulations expedient in foreign countries from which suspected merchandise is usually brought; the precautions necessary in the reception of persons and goods from suspicious places, on their arrival; and lastly, no human precautions being infallible, the political regulations which become requisite when the plague, surmounting the barriers opposed by the magistrate, unhap-

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unhappily makes its way into the place. The various matters comprehended under theſe heads, the firſt excepted, have, particularly by foreign authors, been amply treated of. I ſhall therefore enlarge only on the firſt, and confine myſelf to ſome remarks on the principal points of the others, referring, for a more minute detail, to ſome of thoſe foreigners who have written on the ſubject profeſſedly.

But it may be proper previouſly to diſcuſs ſome general objections to all ſuch preſervative regulations as are founded on the generally received doctrine of contagion, and which have been condemned either as altogether unneceſſary, or as being inadequate to the purpoſe intended.

Objections of the firſt kind are grounded on a ſuppoſition of the plague not being contagious; or, though admitted, in ſome ſenſe, to be contagious, that no goods or merchandiſe, of whatever denomination, are capable of conveying or communicating the infection. In regard to the firſt, I ſhall paſs it entirely over; and indeed, reſpecting the ſecond, might alſo refer to the foregoing book; but as thoſe who contend for the impoſſibility of infection being propagated by merchandiſe, found their chief arguments on the practice of merchants reſident in the Levant, which practice has, in ſeveral inſtances, been ſtrangely miſrepreſented, I have reſerved the detection of ſome of thoſe miſrepreſentations for this place.

"The common practice of all ſorts of men in Turkey, not "only of the Turks, that are ſuppoſed to be infatuated with "their notions about predeſtination . . . . . but even the prac-"tice of Engliſh, French, and of other ſtrangers, ſhow that "their conſtant experience in that country ſets them above any "fears of taking the fatal diſeaſe from merchant's goods. One "cuſtom of the merchants is very particular, and a determining "experiment in this diſpute: for they, in very hot days, take

" their walks in lanes, and in the ſhades made with the packs CHAP.
" of flax; though that is an infamous plague-keeper, and is I.
" brought from Cairo, famed for being the fountain and granary
" of plagues, where they are ſuppoſed to be bred, and from
" thence propagated to all other countries. Nay, a head of flax
" is hung out of every pack for a ſample of the whole; which
" thoſe merchants make no doubt to examine, every bargain they
" make. So little do they know of a plague of peſtilence being
" conveyed by goods, that they handle and examine them intre-
" pidly: even flax of the growth of Grand Cairo[1].

" Would we convert (ſays the ſame writer in another work)
" any one from the fanaticiſm of the plague being conveyed in
" goods; I deſire him to travel into Turkey, and there view the
" behaviour of the Turks, Greeks, or Franks in the time of the
" plague. He will be aſtoniſhed to ſee the familiarity his coun-
" trymen contract with the moſt dangerous diſtemper; and if
" his courage does not lead him to ſhake off his notions, yet he
" may prove a qualified hiſtorian of the madneſs of others,
" which perhaps he may call their reaſonable behaviour. Thus
" has every nation, that have commerce with the Turks, been
" cured of ſuch falſe notions by the practice and experience of
" the Turks. We know (continues he) by the reſiding of our
" merchants in various parts of the Mahometan dominions, how
" to judge in the matter of carrying a plague in a bale of goods.
" I have converſed with ſome who lived in Grand Cairo; and
" who, in great demands for merchandiſe, during a plague, have
" not only attended in their warehouſes, when their goods were
" packed up, but have likewiſe aſſiſted in the buſineſs of flax
" and cotton, without any hurt in themſelves, or perceiving
" any in their labourers. The like accounts we have from Smyrna,
" Aleppo, Scanderoon, Conſtantinople, &c. But what is very

[1] Dr. Mead's Short Diſcourſe explained, p. 34.

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" particular, the dangerous cotton is the merchandiſe they ſmell " at, and handle more than any other[2].

" It is notorious (ſays another writer) to all traders, that the " Europeans converſe without any reſerve with the infected " Turks, and daily receive goods without fear or danger, from " the hands of thoſe who have not many hours to live. And if " goods there, in an infected air, are no wiſe dangerous or hurt- " ful to our conſtitution, that the bringing thoſe goods into a " purer air, ſhould make them pernicious, is a paradox too ſtrange " to be comprehended by common underſtanding[3]."

Doctor Pye had advanced as an argument againſt the plague being produced by one and the ſame ſpecific poiſon, " that Eu- " ropeans have ſometimes not been infected in Turkey, when " the plague raged there among the natives[4]." To which it was replied, " becauſe they either remove out of the way of it, or " ſhut themſelves up; but at Smyrna the French merchants " who uſe not that caution do ſeldom eſcape it[5]." The Doctor's anſwer to this, which had nearly ſtated the matter of fact, deſerves notice, " At Smyrna the Europeans do ſometimes ſhut " up, if the peſtilence happens there at a time when there is no " buſineſs going forward; but at Conſtantinople they never do, " and yet are not ſubject to the ſickneſs which rages among the " natives. As to what this writer (the remarker) affirms in re- " lation to the French, I am informed it is utterly falſe, for the " merchants tell me that there is not an inſtance that a French- " man has died there of the plague[6]" .... In another place, endeavouring to prove that the porters in the Lazaretto at Mar-

[2] Diſtinct Notions of the Plague, &c. p. 103, 105.

[3] Rational Enquiry into the Nature of the Plague, by J. Pringle, M. D. Lond. 1722.

[4] A Diſcourſe of the Plague, by G. Pye, p. 38.

[5] Remarks on Three Treatiſes, p. 60.

[6] The Remarks lately publiſhed, &c. p. 47.

ſeilles

ſeilles had not received their death from the Turkey bales, he ſays, "according to the report of merchants, Frenchmen are not "ſubject to the plague in Turkey; and it cannot be conceived "that ſo ſmall a quantity of infectious air as can be packed up and "brought in a bale of goods ſhould deſtroy them in France, or in "an air and climate diſtant and different; when the whole at-"moſphere of the ſame infectious air is found not to injure them "in the very infected places, and wherein it is allowed to be "bred and generated[7]."

The author mentioned on a former occaſion, and who it appears had himſelf been in Turkey, obſerves, "that the merchants "who have lived in Turkey can inform us, that after the plague "has ceaſed, they, or their ſervants, do handle and ſmell to the "cotton, &c. without receiving any injury. Every one who has "been in Turkey well knows that ſtevidores and ſailors often "work naked, in ſtoving the cotton. This is a laborious em-"ployment, and the hold of the ſhip is exceſſive hot. Farther, "the cotton packs or bales are continually handled and tumbled "about; the labourers too are often bare-footed, therefore they "cannot help treading continually upon the merchandiſe brought "aboard. Nay, I have ſeen the ſailors breakfaſt, and others "ſleep, on theſe bales of cotton, &c. Surely then, if the ſeeds of "contagion were lodged in cotton, theſe men could not eſcape. "It might ſtill be inſiſted on, that if cotton, &c. could imbibe "the malignity, the diſeaſe would frequently, nay every year, "be brought to us; for the plague has raged in the ſeveral parts "at the time our ſhips were taking in their lading.... Suppoſe "a ſhip took in her lading at any port, at the time when the "plague raged there (which I am certain has often been the "caſe) and ſuppoſe[8], &c."

Thus,

[7] The Remarks lately publiſhed, &c. p. 54.

[8] Ingram. p. 94, 99, & 72. This gentleman ſhould not have been introduced again, but that it might be imagined he ſpoke in this point from experience acquired

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Thus, according to the teſtimony of thoſe gentlemen, the European merchants reſident in the Levant, have learnt from long experience, that the notion of infection being communicated by merchandiſe is merely a vulgar prejudice; in conſequence of which they communicate freely with the natives in times of peſtilence, carry on their commerce in the ſame manner as at other times, and never ſhut up in their houſes by way of preſervation, except when they have no commercial concerns to call them abroad: nay, at Conſtantinople they never ſhut up at all. To all this it is added, that neither the merchants, or ſervants employed under them, ſuffer any harm from ſuch intercourſe, and that the former, at leaſt Frenchmen, are not, in Turkey, ſuſceptible of the plague.

Surely nothing can be more diametrically oppoſite to the real practice of the Levant, than the above repreſentation of it. The Venetians, who were the firſt and moſt conſtant traders into that part of the world, had inſtituted quarantines a century prior to the eſtabliſhment of the Engliſh in Turkey. Their merchants, reſident in the Levant, uſed the expedient of ſhutting up, in times of peſtilence, for the ſecurity of their perſons; the merchants of other nations followed the Venetian example; and in all places where the plague makes any conſiderable progreſs, the cuſtom has been maintained uninterruptedly to the preſent day. By that means, the Europeans have preſerved themſelves in times of moſt deſtructive plagues; and as there are no inſtances of their having ſuffered in confinement, except through neglect of preſervative regulations, there are many examples to prove that the Europeans are not exempt from infection, when, like others, expoſed to it; inſtances at Cyprus have been given before in the

on the ſpot. The foundation of the author's certainty of ſhips taking in their lading at places where the plague was raging, does not appear; it is inconſiſtent with a moſt expreſs order of the Levant Company. No Conſul, in ſuch circumſtances, could have granted a clean patent, and without one a ſhip would not have been received in England.

Hiſtorical Journal, and a plague never happens in Syria without furniſhing inſtances of Europeans, and their ſervants, ſuffering from procraſtinating the ſhutting up too long, or venturing from confinement too ſoon. The miſſionaries, conſiſting of perſons of various nations, ſuffer indiſcriminately with the natives, when equally expoſed. In the plague of 1760, one or two only died at Aleppo; the reſt had taken early precautions, and the ſeveral convents ſhut up prior to any of the merchants. But at Damaſcus, and other places where they viſited the infected, above nineteen franciſcan friars periſhed. Theſe were Italians, French, or Spaniards. Several alſo died at Cyprus in 1760, among which were an Iriſh friar, and a native of Flanders. In the late plague of Aleppo, all the European merchants eſcaped; but ſome French natives of the country fell ſacrifices in the beginning, and towards the end of the ſeaſon. In the plague of 1741, a French merchant died, and one of the Engliſh gentlemen was infected[9].

The information therefore which the authors above cited ſay they received from Turkey merchants, muſt either have been partial, or erroneous: or perhaps, in the zeal of ſupporting an argument, what were mentioned as ſingular inſtances, by the merchants, were, by the author, transformed into common occurrences. The inſtance of the flax at Cairo, bears marks of this complexion; for the remark is at once extended to Aleppo, where flax happens not to be one of the commodities dealt in by the Engliſh; and the cottons they export, I believe, are hardly ever brought into the Aleppo warehouſes.

It may further be remarked, that the experience of the merchants, though prior to the Quarantine Act of George the Firſt, muſt be ſuppoſed to refer to a period poſterior to the Year 1664, from which time the regulations of the Levant Company, for lading their ſhips abroad, were probably more ſtrict than they

[9] Natural Hiſtory of Aleppo.

had

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had been in the earlier ſtages of the trade[10]. It is not likely therefore that ſuch licentious proceedings in Turkey ſhould have been common, in any part of the interval between the plague of London in 1665, and the year 1720; and the Quarantine Act of the ninth year of Queen Anne, was ſtill in force at the time moſt of the authors, lately referred to, publiſhed their books.

In reſpect to the conceit of the Europeans or Franks not being ſubject to the plague in Turkey, beſides what has been ſaid above, numberleſs proofs might be produced of the contrary. I ſhall ſelect two, the one a few years after the Engliſh had been eſtabliſhed at Aleppo, the other ſo late as 1719, the year preceding the plague at Marſeilles. In 1589, the plague raged at Tripoly in Syria, in the ſummer; and M. Villamont, then on his travels, aſſerts, that it had deſtroyed forty of the French nation[11]. In 1719, the plague raged at Aleppo from March to the month of September, and ſeveral of the miſſionaries, who had expoſed themſelves, died[12].

[10] As I have no direct authority for ſaying the regulations were more ſtrict, I ſhall give the reaſon of my conjecture. In the directions of the College of Phyſicians, in the year 1636, the ſecond article runs thus. "It is likewiſe neceſſary that there be "care taken that neither men nor goods may come from any ſuſpected places be- "yond the ſeas, or in the land, without certificate of health, or elſe either to be "ſent ſuddenly away, or to be put to the Peſt-houſe, or ſuch like place, for forty "days (according to the cuſtom of Italy)" In the republication of theſe directions, in 1665, the title of the ſecond article is altered, from "*Men or goods from foreign "infected places*," to "Prevention of propagating the infection from place to place," and runs, "As the proviſion already made by authority upon occaſion of prohibit- "ing perſons and goods coming from foreign countries and places infected," &c. Whence it appears that their former advice was rendered unneceſſary by the interpoſition of authority, which had already eſtabliſhed a quarantine. The practice of bills of health was eſtabliſhed long before by the Turkey Company, in reſpect to their own ſhips; for an Engliſh traveller who was at Aleppo in 1596, mentions his having a clean patent, Syria being then free from the plague. Moryſon's Travels, p. 241, 243. An Engliſh writer, who publiſhed a very good Treatiſe on the Plague in 1592, mentions expreſsly the infection being propagated by clothes, &c. as well as by perſons. Simon Kellway, a Defenſative againſt the Plague. Lond. 1593.

[11] Voyage de Villamont, p. 562.

[12] Memoires des Miſſion, vol. iv. p. 82.

That

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That the Engliſh at Aleppo adopted from the firſt the ſame meaſures for their preſervation, which the other Europeans reſident there had done before them, can hardly admit of doubt: there is direct evidence of their having done it ſo early as the year 1600[13]. In reſpect to the French, one of their own writers in 1720, aſſerts it to be a great miſtake, which a ſtrong advocate againſt contagion wiſhed to propagate, that the French merchants in the Levant communicate freely with the Turks in times of peſtilence. "On n'eſt pas bien inſtruit (ſays M. Peiſſonel) "lorſqu'on nous dit que dans le Levant ceux de la nation Fran- "çoiſe vont chez le Turc en temps de peſte, examiner, toucher "& acheter, toute ſorte de marchandiſes. Nous ſcavons cer- "tainement que des le premier ſoupçon de peſte, tous les Fran- "çois ſe renferment dans leurs quartiers, d'ou ils ne ſortent "pas, & ou, en recevant tout avec precaution, ils trouvent le "moyen de ſe conſerver en ſanté au milieu des Turcs em- "peſtés[14]."

I have ſuggeſted it as probable, that the regulations of the Levant Company, relative to the lading their annual ſhips abroad, became ſtricter after the interference of royal authority in 1664; but from what is ſaid by Sir James Porter, embaſſador at the port for ſeveral years, it would appear the care taken by the factories in Turkey in ſhipping their goods in ſuſpicious times, was long prior to that period. I ſhall tranſcribe the whole paſſage, as containing a more diſtinct account than any I have met with elſewhere; though I am in ſome doubt whether what is ſaid of airing and purifying goods, before they are ſhipped, is in ſtrictneſs applicable univerſally to the ports of Turkey.

"All communication of the infection muſt ariſe either from "men or merchandiſe; with regard to the former, when there

[13] See the chaplain of Aleppo's account in that year, book iii. chap. v.

[14] Diſſertation ſur les opinions anciennes & modernes touchant la peſte. Relat. Hiſtorique, p. 402.

"is

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" is the leaſt ſuſpicion of a plague in any ſea-port town of " Turkey, or any neighbouring village, the maſters of ſhips, the " merchants, and the conſul are particularly careful and vigi- " lant to keep the veſſel at a proper diſtance in the port, and " not to ſuffer any of the ſhip's company to go on ſhore, at the " ſame time they will not permit a living ſoul to come on " board, or any goods ſuſceptible of infection to approach the " veſſel. All ſ amen are ſtrictly forbid to go near it; and to do " them juſtice they punctually obey the order: for when the " fear of that diſeaſe is once infuſed into their minds, they dread " it more than a wreck, or a cannon ball.

" The Levant Company's orders, both with regard to men " and merchandiſe before ſhipping, to prevent infection, have " been always ſtrictly obſerved in Turkey: when they had their " general ſhips, their ſeamen were under ſuch command, that " they conſidered themſelves as inhabitants of the veſſel; there " ſcarce appeared a new face on board from year to year; they " were moſt of them men that had families at home, and kept " a watchful eye over each other's conduct, to prevent irregula- " rity and infection, inſomuch that from the firſt origin of the " charter not one of them ever died of the plague. Orders of " the ſame nature were as effectually enforced with regard to " merchandiſe, and as punctually executed as at a Venetian or " French Lazaretto; airing, purifying, and every poſſible pre- " caution was taken before the goods were ſhipped; and it is to " be hoped, we may equally depend upon the execution of the " ſame orders which ſubſiſt at preſent [15]."

From what has been ſaid, it is ſufficiently apparent that the anonymous author of Diſtinct Notions of the Plague, as well as Dr. Pye and others, have given a very erroneous repreſentation of the practice of the merchants in the Levant; and conſequently

[15] Obſervations on the Turks, 2d edit. p. 442. I ſhall hereafter have occaſion to give a particular account of theſe orders.

that

that their argument for the impoſſibility of infection being conveyed in merchandiſe, grounded on the increaſe of the Turkey trade ſince 1665, and which, as they contend, had it been poſſible, could not fail to have frequently introduced the plague into England in ſo long a ſeries of years, loſes much of its force, though at firſt ſpecious. CHAP. I.

"Has not merchandiſe been brought from many parts of "Turkey, all which have very deſervedly an ill name for "the peſtilence, that very commonly rages among them? And "how comes it to paſs that during this conſtant, and uninterrupted commerce, when ſoft and porous goods, the proper "fomes, have been brought from Smyrna, Scanderoon, Aleppo, "Conſtantinople, and other parts, the peſtilence has never taken "a journey hither, in all appearance, thoſe fifty-five years? In "all that time Turkey goods have not ſerved a quarantine, nor "viſited any other Lazarettos, beſides the companies cellars; a "certain proof that goods very ſeldom, or ever, bring a plague "into a country[16]. It is acknowledged that the Turkey company has never once brought us over a plague, ſince their firſt "eſtabliſhment, yet their merchandiſe has always been returned, and from countries where the plague was making great "deſtruction; inſomuch that we never once ſuſpected any ſickneſs being brought by them, excepting a groundleſs jealouſy "in 1665[17]."

Doctor Pye repeats the ſame arguments[18]; and a Doctor Pringle follows in the ſame ſtrain—"Turkey being ſeldom free from "a peſtilential diſtemper, our trade there being increaſed ſo "conſiderably within theſe fifty years paſt, it would be impoſſible for us to eſcape it (who never made uſe of the Italian

[16] Short Diſcourſe explained, p. 33.
[17] Diſtinct Notions of the Plague, p. 105.
[18] Diſcourſe of the Plague, p. 37.

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" cuſtom) if goods were ſufficient to communicate it[19]. It muſt, " (ſays Doctor Browne), create our wonder and admiration (if " contagion was imported in cotton in 1665) how we have " eſcaped from infection ſo many years as are paſt ſince, conſi- " dering ſo many plagues as have happened in ſo many parts of " Turkey to which we trade, and from whence we bring cotton, " mohair, and the like dangerous commodities. Now it is hardly " poſſible to think, but in all this time, conſidering the increaſe " of trade from thoſe parts within the laſt fifty years, but that " ſome goods muſt have been packed up by perſons infected with " the plague, either at Conſtantinople, Smyrna, &c. beſides the " great quantities of coffee we import from Grand Cairo by way " of Alexandria and Roſetta; the canvas bags of which may re- " tain contagion[20]."

Was the real practice of the Levant ſuch as thoſe who urge the above arguments have repreſented it to be; did the merchants in times of peſtilence communicate freely with the Turks; carry on traffic; ſhip their goods while the plague was ſtill raging; and if the goods ſo ſhipped were landed on their arrival in England, without regard to any preventive regulations whatever; it certainly would be a juſt matter of wonder, not only that the plague ſhould not have been imported ſo much as once in a century, but alſo that ſo few of the merchants in the Levant, and of the ſailors who navigate their ſhips, ſhould die of the plague. This admiration, however, will partly ſubſide, when the repreſentation by which it was excited is found to be highly partial, or purely fictitious; and the unprejudiced examiner, finding precautions abroad, as well as at home, have never been altogether neglected, may be inclined to aſcribe the preſervation of England, at leaſt in ſome meaſure, to thoſe precautions. At the ſame time, however, much muſt be allowed for the abſence

[19] Rational Enquiry, p. 8.

[20] Practical Treatiſe of the Plague, p. 12. By Joſ. Browne, L. L. M. D. Lond. 1720.

of

of that peſtilential conſtitution of the air, without the concurrence of which imported contagion, even in Turkey, does not ſpread; for, however inclined to think favourably of eſtabliſhed regulations, I am much in doubt whether they have, at all times, been obſerved with ſuch ſtrictneſs abroad as to remove all cauſe for ſuſpicions "that ſome goods muſt have been packed up by per-"ſons infected with the plague, either at Conſtantinople, Smyrna, "Scanderoon, Aleppo, or Grand Cairo:" ſuſpicions which increaſed in probability after the diſuſe of annual ſhips, in conſequence of the interference of Parliament with the Levant Company's charter, about the year 1744[21]. CHAP. I.

To the miſrepreſentations relative to the Levant, may be added the aſſertion that the fear of infection by goods, and the practice of quarantines in England, are only of very late date. As early at leaſt as the beginning of the laſt century, quarantines for foreign goods are recommended by the College of Phyſicians *according to the cuſtom of Italy*, and, as was remarked before, were enjoined by royal authority in 1664. In 1669, Aleppo was viſited by a very ſevere plague[22], and there can be no doubt the quarantine eſtabliſhed ſo lately before, was renewed on this occaſion, ſuppoſing it had been diſcontinued: nor from any thing that appears to the contrary, is there cauſe for thinking it was not hereafter occaſionally renewed, according to exigencies; for from that period to 1719, the plague reviſited Aleppo ſeveral times[23]; and at Conſtantinople, and other Turkiſh ſea-ports, its return was ſtill more frequent. Early in the preſent century, the plague raged in various places on the Continent; and a quarantine act of parliament paſſed in the ninth year of Queen Anne. Between the eſtabliſhment of the Levant Company in 1581, and the year 1665, London is ſaid to have been viſited with four great plagues,

[21] Porter's Obſervations, p. 372.

[22] D'Arvieux ſays, it carried off 100,000 people, vol. vi. p. 414.

[23] Nat. Hiſt. of Aleppo.

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ſome of which continued for ſeveral ſucceſſive years. Since 1666, near one hundred and twenty years are now elapſed, and the plague has never appeared in England, though not leſs than uſually common in moſt of the trading towns in Turkey.

CHAP. II.

Account of the introduction of plagues into England, at various times, imperfect—Introduction of the plague at Meſſina in 1743—That the notion of contagion, or of its being conveyed in merchandiſe, is of late date, ſhown to be erroneous—The Arabian writers ſilent on contagion—Other objections to infection being conveyed in merchandiſe enumerated.

WITHOUT engaging in a ſpeculative queſtion, whether the air of itſelf is capable of producing the true plague, independent of imported contagion, in a place where it is not an endemical diſeaſe[1]; the having, in medical hiſtory, met with no teſtimony of its being ever bred in Britain, or indeed on the Continent of Europe, is ſufficient to induce me to concur in opinion with thoſe who hold it to have been always imported from other countries.

That the manner in which it is imported, or introduced, cannot always be preciſely traced, I conſider as a ſlight objection to this opinion; becauſe it cannot well happen otherwiſe in a country encircled by a vaſt extent of ſea coaſt, or in a large city of extenſive commerce, where ſo many avenues are conſtantly open for its reception. But in ſmaller territories, and more confined in-

[1] Arbuthnot on Air, p. 180.

tercourſe,

tercourſe, the progreſs of contagion has been diſtinctly traced, and has been ſucceſsfully ſtopped by proper precautions. CHAP. II.

In this view, it is no wonder that ſo little ſatisfactory is to be found in the Engliſh Chronicles, relating to the importation of plagues. The dreadful peſtilence of 1348, is ſaid to have made its firſt appearance in England, in the ſea-port towns of Dorſetſhire; thence to have paſſed into Devonſhire and Somerſetſhire, as far as Briſtol; and though the Glouceſterſhire people cut off all communication with that city, yet at length it reached Glouceſter, Oxford and London[2]. The plague of 1563 is ſaid to have been brought into England by the ſoldiers who had been at the ſiege of Havre de Grace[3].

Very imperfect accounts are met with of the commencement of plagues in the 17th century. That of 1609 (which by the way appears, by the bills of mortality, to have been a continuation of that of 1603) is ſaid to have begun among certain ſeamen in Whitechapel; that of 1630 to have been imported from Turkey in a bale of carpets; and that of 1636 to have been brought from Amſterdam[4]. The laſt plague of 1665 was ſaid to have been brought into Holland in a bale of cotton from Turkey, and from thence to have been imported into England[5].

The Levant Company, in their printed orders to their factories abroad, affirm that the plague was never brought to England by means of their commerce. Sir James Porter goes farther,

[2] Hiſtorical Account of the Plague, &c. p. 12, by R. Goodwin, M.D. Lond. 1743.

[3] Ibid. p. 22.

[4] Medela Peſtilentiæ, p. 2. Lond. 1665.

[5] Hodges, in a Letter to a Perſon of Quality, publiſhed 1666, ſays expreſsly, "After a moſt ſtrict and ſerious enquiry, by undoubted authorities, I find this peſt "was communicated to us from the Netherlands by way of contagion; and if, "moſt probable relations deceive me not, it came from Smyrna to Holland in a "parcel of infected goods."

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for he aſſerts that the plague was never brought into theſe kingdoms immediately from Turkey; without limitation to the commencement of the Levant Company's eſtabliſhment; and adds, moreover, that the Dutch never received the contagion from thence[6].

Theſe are very poſitive, but, at the ſame time, unſupported aſſertions. Sir James thinks he could make it clear to the cool reaſon of a Dutchman, but fears he would find more difficulty with his own countrymen, blinded with paſſion and prejudice. But ſurely any man, without being under the influence of either paſſion or prejudice, might reaſonably wiſh for ſomething more than ſimple aſſertion, relative to facts beyond the compaſs of the aſſertor's own experience.

When I ſaid before, that London had been viſited with four great plagues ſince the firſt eſtabliſhment of the Engliſh Levant Company, it was not my intention to inſinuate that the plague had always, or had ever been imported by commerce from that country. I have met with ſuſpicions, but with no poſitive proof of its having been ſo imported. Previouſly to the 16th century (according to Anderſon) "England carried on little or no commerce in her own ſhips, but from the year 1511 to the year 1534, divers tall ſhips of London, and of Southampton and Briſtol, had an unuſual Trade to Sicily, Candia and Chio, and ſometimes to Cyprus, and to Tripoly in Syria, and Byroot[7]." It may be remarked here, that in the two centuries immediately preceding the ſixteenth, England was no leſs frequently viſited by the plague than afterwards, which could not then be aſcribed to her Levant trade.

The great plague of 1348 was brought by certain ſhips from the Levant to Sicily, Piſa, Genoa, &c.[8] and ſince that period it

[6] Obſervations on the Turks, p. 41.
[7] Anderſon's Hiſtory of Commerce.
[8] Muratori Governi in tempo di Peſte, p. 3.

has found its way ſeveral times in the ſame manner, the laſt memorable inſtance being that of Meſſina in 1743. It will however appear, upon enquiry, that Italy has been leſs frequently viſited ſince the eſtabliſhment of quarantines and lazarettos in the maritime towns, though from the impoſſibility of always preventing breach of rules, they have not always proved infallible defences [9]. I know

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[9] From the original letter formerly mentioned from a gentleman who reſided at Meſſina in the year 1743, giving a circumſtantial account of the progreſs of the plague in that place, I ſhall tranſcribe what is ſaid of the manner of its introduction, as a flagrant example of fraudulent impoſition on the Magiſtrates of Health. "Though you will naturally have ſeen various relations of the manner of the "plague's having been introduced at Meſſina, yet I am willing to begin by men- "tioning, that on the 20th of March, 1743, arrived in that port a Genoeſe tartan, "under Neapolitan colours, commanded by a Genoeſe padrone, by name Giacomo "Bozzo, though, when he put himſelf under the Neapolitan protection, he took "the name of Aniello Bara. The cargo conſiſted of wool, wheat, tobacco, and "ſome linens, loaded in ſeveral parts of the Morea that actually were infected, or "had been a very little time before infected with the plague; but the padrone, con- "cluding that he ſhould not be admitted at Meſſina, had he proceeded directly "thither from thoſe parts, treacherouſly touched at Miſſilongi in the Gulph of "Lepanto, over againſt Cephalonia, and was there furniſhed with a clean bill of "health, with which he proceeded to Meſſina. This he exhibited on his arrival, "in the uſual manner, and manifeſted only the wool and corn; declaring, upon "oath, that one of the ſailors had fallen into the ſea during the voyage, for which "reaſon there was one man on board leſs than ſpecified in the bill of health.

"This declaration, on oath, together with the exhibition of a clean bill of health, "induced the magiſtrates of the health office (who were then ignorant of the other "circumſtances of his having been firſt at the other infected parts of the Morea, "or that one or two of the ſailors had died, on board, of the plague) to admit the "veſſel to quarantine at the Lazaretto, wherein, with the uſual formalities, they "began to depoſit the wool and the corn; nor, according to human appearance, "would the infection have ever been introduced into the city, had it not been for a "fiſherman who afterwards, on his death-bed, diſcloſed the fatal ſecret of his "having found means, ſoon after the padrone's arrival, to receive from him in "the night ſome bales of tobacco, covered with infected canvas, and ſome pieces "of linens, which he carried by ſtealth to his own houſe, in a part of the city "called Pizzillari, where the diſtemper in effect firſt appeared; ſo that the running "aſhore of thoſe infected goods was the cauſe of all the fatal conſequences that en- "ſued;

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I know not at what period a regular Lazaretto was eſtabliſhed at Marſeilles, but it is remarkable that of twenty plagues mentioned in the records of that city, eleven happened in the 16th century, and only two in the 17th[10].

"The firſt commercial treaty with the Ottoman Porte, made "by any of the European monarchs, was (according to Anderſon) "in the year 1535, between Francis the Firſt, and Solyman the "Magnificent. The Venetian ſtate next obtained a commercial "treaty in 1580, a little while prior to the Engliſh." But both Venetian and French, particularly the former, had long before that time carried on a Levant trade; and even the Engliſh merchants had occaſionally viſited that country. The Venetians are ſaid to have obtained leave of the Pope, about the year 1150, to trade with the Infidels of Alexandria; and it appears from Belon that they had a Conſul eſtabliſhed at Aleppo in the year 1448[11]. The ſilence of that traveller, in reſpect to his countrymen, ſhows they had at that time no Conſul ſettled there; and indeed it is probable the French had no regular ſettlements in Syria, before the 16th century.

Quarantines were firſt inſtituted in Europe, about the year 1484[12]; and the Venetians are ſaid to have led the way. At what time

"ſued; which I mention in juſtification of the magiſtrates who took all the moſt "vigorous and prudent meaſures at the Lazaretto for the public preſervation; and "in diſcharge of their office afterwards couragiouſly ſacrificed their lives, devoting "themſelves, in a manner, to certain death: but they were betrayed by their ſub-"altern guards in whom they confided."

A ſtill more circumſtantial account of this matter is given in a book publiſhed at Naples in 1745—Memoria Iſtorica del Contagio della Citta da Meſſina, dell Anno 1740. Da Orazio Turriano.

[10] Relation Hiſtorique, p. 12.

[11] Belon's Obſ. lib. ii. c. 102.

[12] "Se crediamo a Lorenzo Candio, e ad altri, nel 1478, eſſenda fiera la peſte, "furono introdotti rigori inuſitati, & cominciarono circa què tempi a dirizzarſi "Lazaretti

time other free cities of Italy, as Genoa, Florence, Piſa, &c. adopted the cuſtom, I have not learned; but it is highly probable all of them uſed occaſional precaution, though they might not have regular quarantines, as they came to have afterwards. It is clear, from the teſtimony of Boccacio, that Florence had uſed means for her preſervation in 1348[13]; and it appears that in the ſame plague, in England, communication with the city of Briſtol had been prohibited by the people of Glouceſterſhire[14]. CHAP. II.

This ſhows how groundleſs is the aſſertion that the notion of contagion took its riſe in Europe no earlier than the 16th century, and how abſurdly it has been aſcribed merely to political intrigue at the time of the Council of Trent[15]. "The Venetians (ſays a certain author) "were long poſſeſſed of the profitable Turkey "trade, and were almoſt the only merchants that traded into "Turkey, and furniſhed the weſtern parts of Europe with this

"Lazaretti (forſe prima ſi mandavano gl'infetti alle ſole capanne, praticate anche "dipoi in alcune città) & a metterſi pena la vita per ogni minima coſa." Muratori, lib. i. c. xi. p. 95.

If we give credit to Lorenzo Candio and others, the plague raging fiercely in the year 1478, regulations unuſually ſtrict were introduced; and about that time they began to conſtruct Lazarettos (probably before this they ſent infected perſons to ſolitary thatched cottages, a cuſtom ſince practiſed in ſome cities) and to make the ſmalleſt breach of rules a capital crime.

According to Mr. Howard, the Health Office at Venice was inſtituted in the year 1448. Account of Lazarettos, p. 12.

[13] "Et in quella non valendo alcuno ſenno, ne humano provedimento, per lo "quale fu da molte immonditie purgata la città da ufficiali ſopra cio ordinati; & "vietato l'entrarvi dentro a ciaſcuno infermo, & molti conſigli dati a conſervation "della ſanità." Boccacio Decameron, p. 2. Amſterd. 1679.

But in that plague, no prudence nor human precaution, could prevent the contagion from ſpreading. The city was cleared of much filth under the direction of officers appointed for that purpoſe; acceſs was denied to all ſick perſons, and many advices were propoſed for the preſervation of health.

[14] Goodwin, p. 12.

[15] Diſtinct Notions, p. 122.

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" merchandiſe; in all that time they had no notions of the " frequent plagues being conveyed in goods they brought home, " and were tranſported into other nations. And it is very re- " markable, that about the time they inſtituted officers of " health, and begun the practice of quarantines againſt mens " perſons, though not for merchandiſe, their trade fell ſenſibly " into decay. Our merchants about the ſame time made expe- " riments of the Turkey trade, and became proſelytes to this " Turkiſh opinion, that a plague is not conveyed in goods[16]."

The anachroniſm here is remarkable, for we have ſeen that the Venetians had inſtituted quarantines ſeventy years prior to the Council of Trent, and it is known that their trade continued to flouriſh for a century after that inſtitution. Its decline was owing to a concurrence of very different cauſes; among which may be reckoned the ſpirit of commerce diffuſed amongſt other nations, who began now to carry on trade in their own ſhips, which had, till that time, been chiefly carried on by Venetian ſhips. Our merchants were eſtabliſhed in Turkey about the year 1581, and it has been ſhown already, on a former occaſion, with what juſtice it can be ſaid they became proſelytes to the Turkiſh opinion, that a plague is not conveyed in goods. In the reſtriction of quarantines at Venice, to mens perſons, the aſſertion being ſupported by no authority, the author is not likely to be more accurate than he has ſhown himſelf to be in chronology.

If the notion of contagion being conveyed in merchandiſe, be found to be juſt, it is very immaterial whether it be an ancient or a modern notion. It were ſtrange to contend that it muſt be erroneous, becauſe not promulgated earlier. Something, however, like this argument is urged by the opponents of contagion. The ancient Greek phyſicians (it is ſaid) make no mention of the plague being contagious; the Arabians are equally ſilent,

[16] Diſtinct Notions of the Plague, p. 104.

though

though they practiſed in countries where the plague is frequent[17].

As to the ancient Greek phyſicians, I ſhall refer to thoſe who have been at ſome pains in the enquiry[18]; and only offer a ſhort remark on what is ſaid of the Arabian phyſicians.

The author of Diſtinct Notions of the Plague, refers to Mercurialis for the having ſearched the ancient writings of phyſicians, without being able to diſcover any opinion among them of the plague being communicated by a fomes; but when he himſelf talks of the "Arabian phyſicians, who relate the ſmall regard the Turks have to cotton, or other merchandiſe, or apparel, giving them the plague[19]," it is to be wiſhed he had mentioned in what part of their voluminous writings theſe relations are to be found. Rhazis and Avicenna are the only two authors named, but eſpecially the firſt; who, it is ſaid, lived to the age of one hundred and twenty, and muſt conſequently have had repeatedly opportunities of practiſing in the plague. But it was not adverted to, that thoſe great men practiſed in regions where the true plague rarely or never appears: and even ſuppoſing they had frequently practiſed in times of peſtilence, very ſubſtantial reaſons might be aſſigned for both, as Mohammedans, being ſilent on the ſubject of contagion. I ſhall only add further, that though Rhazis wrote fully and profeſſedly on the ſmall-pox, in a diſtinct Treatiſe, it will be difficult to point out any paſſage in that work expreſsly mentioning the diſeaſe being contagious.

[17] A writer in 1665 remarks, "that ſome made it an argument againſt the reality "of contagion, that the ſcripture doth not ſay the plague is infectious;" to which the author replies, "Why neither doth it ſay that whoredom breeds the pox." Kemp on the Plague, p. 16.

[18] Maſſaria Oper. in fol. p. 500.—Mead, p. 10.—Gaſtaldi, p. 712.

[19] Diſtinct Notions, p. 99.—Ingram, p. 65.

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It will be ſufficient barely to mention ſome of the other objections made to the poſſibility of the plague being conveyed in merchandiſe. "If goods (ſays Pye) receive infection, they muſt "have it from or by means of the air; unleſs it be ſuppoſed "that goods are kept in the bed-chambers of the ſick.—If it be "ſaid, that goods may be packed up by diſeaſed perſons, this is "very improbable; becauſe as packing of goods is a laborious "work, which requires a great deal of ſtrength, it cannot be "ſuppoſed that perſons ſick of the plague have ſtrength enough "for ſuch hard labour[20]. — If contagion could be conveyed "in goods, the people who are ſo cloſely pent up together on "ſhip board, muſt neceſſarily be infected, or at leaſt could not "eſcape upon opening the hold, on the ſhip's arrival in port. "Next to the mariners, the cuſtom-houſe officers, warehouſe-"men, and thoſe who open the bales muſt be liable; but there "is no inſtance of any having ever been infected. And laſtly, "that as there is no example of any of the mariners, on board "the Turkey ſhips dying of the plague, either in the paſſage "home, or after their arrival in port; ſo the diſtemper in Lon-"don has always broke out, not near the cuſtom-houſe, or "where goods are houſed, but in places remote and uncon-"nected with commerce, as Whitechapel, St. Giles, Clare-"market, &c.[21]

To anſwer theſe objections ſeparately, were to repeat what has already been ſaid on former occaſions. In whatever way goods receive infection in Turkey, the experience of Marſeilles ſhows they do receive it, and are capable of conveying it to a diſtance. This, though it does not amount to a proof that the plague may in the ſame manner be conveyed from Turkey to England, certainly furniſhes a ſtrong preſumption, and is fully ſufficient to juſtify preſervative precautions: at leaſt, till ſuch time as better arguments be produced againſt their expediency than thoſe merely

[20] Diſcourſe of the Plague, p. 37.

[21] Pringle's Rational Enquiry, p. 9.

hypothetical, or ſuch as are drawn from the length of voyage; for the ordinary paſſage of a ſhip from Scanderoon to London, is not longer than the paſſage of Chataud's veſſel to Marſeilles. CHAP. III.

CHAP. III.

A late writer's opinions concerning quarantines examined—Miſtakes, relating to the growers of ſilk in Turkey, to their flying from their habitations, and to the plague's ſcarcely ever viſiting parts where the ſilk is cultivated, corrected—Length of voyage from Turkey no ſecurity againſt infection—Levant Company's orders to their conſuls regarding the ſhipping of goods in Turkey.

I SHOULD, in the preceeding chapter, have concluded my remarks on objections made to the neceſſity of quarantines, and to the probability of infection being imported in merchandiſe from the Levant, had I not thought it incumbent to take ſome notice of what has been publiſhed on the ſubject, by a later writer than any of thoſe hitherto mentioned; whoſe authority being, on many accounts, highly reſpectable, might lead to errors into which, I conceive, the author himſelf was led through miſinformation, reſpecting facts beyond the limits of his own obſervation.

"The ſorts of merchandiſe (ſays Sir James Porter) thought "to be moſt ſuſceptible of conveying the contagion, are ſilks, "cottons, mohair yarn, and goats wool; even the moſt timo-"rous cannot work up their imaginations ſo far as to find it in "box, wood, fruit, or drugs[1]." Whether the four laſt articles be altogether unſuſceptible, is perhaps not quite ſo clear, nor

[1] Porter's Obſervations, p. 446.

would

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would a man be reckoned among the moſt timorous who might happen to entertain doubts, more eſpecially in reſpect to the canvas, mat, or other packages of drugs; unleſs an antidotal quality were conferred on all drugs, which hitherto has not been clearly ſhown to belong to any of them. Theſe articles, however, are generally deemed leſs ſuſceptible, and are uſually ſubjected to a ſhorter proceſs of purification[2].

"The ſilk growers, whether Chriſtians or Turks, have, as I "have been informed, diſtinct apartments for that purpoſe; they "do not lay in the rooms where the ſilk worms ſpin, nor where "the ſilk is ſeparated, divided, made up in ſkains, and packed "in the bales, ſo that in the whole proceſs there ſeems little "probability that the moſt ſubtle infection can be communicated "to the ſilks[3]."

It is very true that the people in the gardens and villages, do not uſually ſleep in the apartments where the ſilk worms are fed and ſpin; and from a ſuperſtitious dread of the influence of evil eyes, they do not like that ſtrangers ſhould enter there: but

[2] "Il pane, vino, zucchero, limoni, cedri, e aranci, il miele, i ſalumi, e for-"maggi, gli aromati, le robe medicinali, le cere, e le droghe d'ogni ſorta, ſi poſ-"ſono ricevere liberamente, avvertendo ſolo di levar gl'invogli, le corde, i ſacchi, "le carte, le caſſe, i vaſi, i barili, ove foſſero tali robe. Coſi le farine, il frumento, "frumentone, o ſia grano Turco, e tuttigli altri grani, e legumi, ſi poſſono libe-"ramente prendere, a riſerva ſempre de' ſacchi, e d'altri ſimili invogli, ed arneſi, "che ſi debbono laſciare indietro, o profumare, o lavar con acqua, ſecondo la loro "qualita." Muratori, lib. 1. c. x. p. 84.

Bread, wine, ſugar, lemons, citrons and oranges, honey, ſalt meat or fiſh, cheeſe, ſpices, medicines, wax, and drugs of all ſorts may be freely received, only taking care to take off the wrappers, cordage, bags, paper, cheſts, veſſels, barrels, containing the ſaid articles. In like manner flour, wheat, Turkey corn, and all other grains, and pulſe, may freely be received, but always without the bags and other like packages or coverings, which muſt be left behind, or fumigated, or waſhed with water, according to their quality. See, on this head, Gaſtaldi de avert. & profligand. Peſt. cap. 244.

[3] Porter's Obſer. p. 446.

that

that is by no means the caſe in the after-management of the ſilk; for in winding it off, making it up in ſkains, &c. they eat and ſleep indifferently where they work. The ſilk, when brought to Aleppo, is cleaned in the merchants warehouſes, ſorted, and re-embaled.

The cleanſing of the ſilk is no laborious employment, and may be performed, as well as the winding it off and tying it in ſkains, not only by convaleſcents from the plague, but even by perſons ſlightly infected; and, in fact, I have known theſe Stracciadores (ſo the ſilk cleaners are called) conceal their ſituation, to prevent loſing their employment: concealing the plague's being in their own family, for the ſame reaſon, is a common practice. This happens only in the beginning, before the plague cauſes alarm, or towards the latter end, when, in the language of the Levant, it is ſaid to be ceaſed; for in the intermediate time the Europeans, at Aleppo, admit of no work to be carried on in their warehouſes.

Goats wool and drugs are alſo cleaned in the houſes of the merchants; and the perſons employed, being of ſtill lower rank than the Stracciadores, are in ſuſpected times conſidered as more dangerous. They uſually therefore are diſcharged on the firſt alarm, and are more cautiouſly received again, after the ceſſation of the plague. It may be remarked alſo, that theſe people have leſs intercourſe with the ſervants of the warehouſe, ſome ſeparate or remote chamber being commonly allotted for their work; whereas the ſilk is cleaned in the principal and open warehouſe. But the mean dwellings of the goats wool cleaners are very liable to infection, and they of themſelves will never make a diſcovery while there are hopes of concealing the diſtemper effectually. The Jews, who are the principal drug cleaners, have it not ſo much in their power to hide the diſtemper; an infected houſe being ſoon known in their quarter.

Sir

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Sir James Porter was certainly miſinformed in the following circumſtances: "That in thoſe parts of the country where the "ſilk is made, namely, at and about Antioch, Tripoly and La-"tachia, on an alarm from the plague's appearance, the people "immediately fly from their habitations, and as they are gene-"rally Chriſtians who buy that commodity from the growers, and "who are a ſort of agents between the ſeller and the buyer, "their fears prevent them from approaching men or merchan-"diſe, from whence they ſuſpect ſo much as a poſſibility of re-"ceiving infection[4]."

It may be remarked in anſwer to this, that the growers of the ſilk, if Turks, ſo far from flying from their habitations, never leave them till called off by death; and if Chriſtians, though part of the family may fly, ſome always remain to take care of their property, unleſs where they can tranſport the whole along with them. But no people of whatever denomination abandon their worms at work, leave the pods to be deſtroyed, the harveſt ungathered; they have too much at ſtake. The ſame may be aſſerted of the agents ſent into the country, who conſiſt of Turks, as well as Chriſtians and Jews; for however much the two latter may dread the plague, they ſeldom think of flying till they have finiſhed their buſineſs; and on their return to town, ſhould occaſion require it, are equally ready to bear teſtimony that the places whence they came remained remarkably healthy; reſerving mentally, for the benefit of commerce, that they had ſeen ſeveral periſh in the plague.

But it is ſtill more unaccountable how it came to be affirmed, that the plague ſcarce ever rages in the places where the ſilk, in Syria, is made. "Even granting ſuch infection to be poſſible or "probable, we have ſtill ſtronger reaſons for ſecurity; for we "may ſafely affirm, that the plague ſcarce ever rages in thoſe "parts of the country where the ſilk is made, namely, at and

[4] Obſervations on the Turks, p. 447.

"about

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" about Antioch, at Tripoly and Latachia - - - an accident may " indeed appear once in fifteen or twenty years[5]." From the manner in which this matter is ſtated one would naturally conclude, that only a few ſcattered inſtances of infection occurred at thoſe places, and that at very diſtant periods. Now the fact is, that Aleppo, in the ſpace of forty years, viz. between the years 1718 and 1763, had been five times viſited with the plague[6]; that Antioch, as well as the other places mentioned, always ſooner or later ſuffer in the common calamity, the villages often more ſeverely, in proportion, than the towns; and that the ſilk from Antioch, and alſo part of that from other places, is cleaned at Aleppo, from whence it is ſent, by way of Antioch, to Scanderoon. By omitting entirely all mention of Aleppo, room was left for imagining, what is very far from being the caſe, that Antioch, Latachia, and Tripoly, with the adjacent diſtricts, where the Syria ſilk is chiefly cultivated, enjoyed a peculiar exemption, or, in times of peſtilence, were little influenced by the vicinity of an infected city, with which they maintain conſtant intercourſe.

As to what is ſaid of Kirgatigh, and other parts of Aſia Minor, where the cottons grow; and of Angora, where the mohair yarn is ſpun and packed, namely, that " they are very ſeldom infected " with the plague[7]," I can ſay nothing from my own knowledge, but hope the information collected concerning them is more exact than what has been produced regarding Syria.

" All ſorts of merchandiſe (continues Sir James Porter) ſuſ- " ceptible of infection, paſs through the hands of our Engliſh " merchants or factors at Aleppo, Smyrna, or the places from " whence they are ſhipped; they are examined ſtrictly by them, " or by their ſervants. The deſire of ſelf-preſervation is as " ſtrongly implanted in the breaſt of an Engliſhman, and actuates

[5] Porter's Obſervations, p. 447.

[6] 1719. 1729. 1733. 1742, 1743, 1744. 1760, 1761, 1762.

[7] Porter's Obſervations, p. 448.

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" him as powerfully abroad as at home; he would not ſurely
" venture the loſs of his life by infection, if there were the leaſt
" grounds for ſuch an apprehenſion. He muſt doubtleſs be cer-
" tain that he runs no riſk upon ſuch occaſions. May not then
" thoſe, who receive them in England many months after, have
" the ſame certainty of their being free from danger[8]."

That the deſire of ſelf-preſervation actuates an Engliſhman as powerfully abroad as at home, will readily be admitted. But men of every nation, and in all climates, daily riſk their healths and their lives, in various ways, and from various motives. It by no means follows, becauſe a man expoſes himſelf in time of peſtilence, he therefore muſt be certain that he runs no riſk: no more can be inferred than, that he is ſatisfied with his own reaſons for incurring riſk. In the commencement of a peſtilence, the merchant who happens to have no ſhip on deſpatch, or other buſineſs to keep him abroad, will more ſpeedily, and with leſs reluctance ſubmit to preſervative reſtrictions, than he who unhappily finds himſelf eventually involved, by the temporary interruption of commerce, in certain loſs and diſappointment. Conſtant experience in Turkey demonſtrates this. Men in theſe different ſituations ſee the ſame reports through different mediums. The firſt perceives leſs cauſe for doubt, thinks ſimple probability ſufficient ground for conſulting his perſonal ſafety, and deems it unjuſtifiable raſhneſs to expoſe himſelf needleſsly. The other is more inclined to doubt the truth of the reports brought him, and to deceive himſelf with hope; he naturally inclines to the ſide moſt agreeable to his wiſhes, and, till conviction arrives in full force, commercial intereſt and the principle of ſelf-preſervation hold perpetual variance. If therefore thoſe who receive the goods in England, have no better aſſurance of their being free from danger, than thoſe have by whom the goods were ſhipped, the public health, ſo far as contagion is concerned, ſtands on a very precarious foundation.

[8] Porter's Obſervations, p. 449.

The

The aſſertion of the plague's never having been introduced into England or Holland immediately from Turkey, has been taken notice of before, and the following aſſertions may perhaps be found not better ſupported.

"There is not upon record, nor has a ſingle living witneſs "ever related an inſtance of an Engliſh factor, or ſervant's, dying "of the plague, at any of the ſea-port towns, or in any other "part of Syria or Aſia Minor, and but one only in Conſtanti-"nople, in almoſt a century; though the diſeaſe very frequently "rages in that metropolis[9]." It had been remarked before, in regard to ſeamen, "that from the firſt origin of the charter, not "one of them ever died of the plague[10];" and here it would appear that no factor, or other Engliſhman, for near a century, had died of the plague, one excepted at Conſtantinople.

It would have been ſatisfactory to have known whence this information, ſo poſitive, was derived. I have known many mariners die in Turkey, but know of no regiſter in which the name of their maladies was recorded. Did no Engliſh ſhip, during a plague, or in ſuſpicious times, lying in a Turkiſh port, ever loſe any of her crew? That ſuch a thing never happened in the courſe of a century and a half, can hardly be ſuppoſed; proviſion even is made for ſuch a caſe, in the orders of the Levant Company. If it did happen, does it any where appear of what diſeaſes ſuch men died? and is it ſo eaſy a matter, in ſuſpicious times, to pronounce in all circumſtances of a mortal diſtemper, that it is not the plague? I have known inſtances of ſailors in port dying at ſuch times, under ſtrong circumſtances of ſuſpicion, though not with eruptions. Can I imagine no ſimilar inſtances were met with in ancient times? and knowing, as I do, how many die of the plague without eruptions, and how often the eruptions are concealed, can I deem it more raſh to reckon ſuch ſuſpicious caſes

[9] Porter's Obſervations, p. 450.

[10] Ibid. p. 443.

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real plague, than at once to pronounce them not peſtilential? The declaration therefore that no Engliſh ſailor in Turkey ever died of the plague, ſince the origin of the Company's charter, requires other proofs.

One Engliſh factor only is ſaid to have died at Conſtantinople, in almoſt a century. It muſt be allowed the death of a factor, in the plague, was likely to leave a ſtronger impreſſion, and be longer remembered, than that of a private ſailor; but ſtill, at leaſt at Aleppo, there are no records to have recourſe to. Funerals are uſually regiſtered by the chaplain; laſt wills, and other papers are depoſited in chancery; but from none of theſe materials can it be diſcovered of what malady the deceaſed died; a circumſtance of that kind belonging to private letters, which are memorials ſoon loſt.

Regarding the ſervants of the merchants, including the menial ſervants in the family, inſtances of their being infected are well remembered in Aleppo, though no record, perhaps, could be produced to prove it. They do not indeed die in their maſters houſes, becauſe they are tranſported elſewhere, as ſoon as the diſtemper has diſcovered itſelf[11]. For forty years preceding the year 1760, no plague had happened at Aleppo in which inſtances in point were not in the remembrance of the natives; in the courſe of 1760, ſeveral were met with; and ſurely it cannot be concluded from the ſilence of records, which never were kept for that purpoſe, that ſimilar inſtances did not happen in the earlier periods.

As the general aſſertion, in ſo far as regards Syria, has been found erroneous, I am inclined to ſuſpect the whole, as having been too haſtily hazarded upon ſlight information. At the ſame time, I do not conſider a few inſtances of European factors or

[11] See Hiſtorical Journal.

mari-

mariners dying of the plague, in a long courſe of years, as being at all derogatory of the precautions taken in the Levant, in conformity to the Turkey Company's regulations. The beſt regulations may happen ſometimes to be eluded; that, in the ſpace of above a century and a half, they ſhould never have been eluded, would be a miracle. CHAP. III.

It were to be wiſhed a clearer account had been given of the practice of the Dutch, as to quarantines. In one place it is ſaid, "They have admitted ſhips into their ports, either with clean "or foul bills of health, and have found themſelves, as we may, "always ſafe[12]." In another, "They have purſued the ſame "plan (with the Engliſh) and remain in full ſecurity under that "long experienced regulation, however imperfect their own may "be at home[13]." But from the account given of the Levant Company's regulations, it does not appear that the Engliſh ever deſpatched ſhips with foul patents, except perhaps where the veſſel had taken in her lading before the plague broke out, and in ſuch caſe ſhe was permitted to leave the port, bringing a certificate of her procedure; nor does it appear probable they

[12] Porter's Obſervations, p. 441.

In a Treatiſe publiſhed at London in 1721, by a Member of the College of Phyſicians, the following account is given of the practice in Holland at that time. The author, after remarking on the method of lines and trenches uſed in France, ſays, "In Holland and Flanders, they have fenced themſelves as much as poſſible "againſt the contagion. They ordered a quarantine to be performed by ſhips com-"ing from ſuſpected places. Not contented with this, they ordered that all ſuſpected "ſhips, with their cargoes, ſhould be burnt. The ſhip's crew muſt waſh and dip "in the ſea, and I ſuppoſe freſh clothes were ordered for them to put on after their "own were burnt; ſubſiſtence was left at ſome good diſtance, which the quaran-"tine men muſt fetch at certain hours." A Theorico-Practical Treatiſe of the Plague, by Philip Roſe, M. D. Lond. 1721.

[13] Porter's Obſervations, p. 444.

From the account given of the Dutch method of quarantine, deſcribed in a letter to Mr. Howard, from the Engliſh merchants at Smyrna, it would appear to be imperfect indeed. Howard on Lazarettos, p. 27.

would

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would attempt to purify and ſhip goods while the plague continued in the place; neither could the Dutch, on the ſuppoſition of their purſuing the ſame regulations.

The ſecurity of both nations, according to Sir James Porter, depends on the length of the voyage from Turkey, and the precautions taken in that country, for "the precautions taken (at "home) by the Dutch and us, by quarantines (if the plague "were as contagious as many ſpeculative minds are apt to ima-"gine it) would rather facilitate its entry[14]. The length of the "voyage to Turkey, and good precautions taken in that coun-"try, have been, and may again be, the means of preſerving "both the Dutch and us[15]."

But Sir James himſelf has given a very good reaſon why equal dependance cannot be held on the ſame regulations, in the preſent ſituation of the Levant trade. While that trade was carried on by annual ſhips, the ſailors, according to his repreſentation, were in a regular fixed employ, practiſed in the country, and under perfect ſubjection; which certainly cannot be ſaid of the preſent race. The attention of the Conſuls, then confined to a few ſhips, was not harraſſed, as it has been ſince, by a medley of ſmaller veſſels; of adventurers unacquainted with the cuſtoms of the country, who, under the neceſſity of making the moſt advantage of a voyage, which they probably never will repeat, conſider every reſtriction or impediment to their deſpatch as an unreaſonable or tyrannical exertion of the magiſtrate. The captains of ſhips, who ought to ſuperintend the execution of regulations, are often ſtrangers, bred in other ſervice; not aware of the dangerous conſequence of infractions, they are leſs vigilant in preventing them: and, not being dependent on the Company, they are leſs under control of a Conſul, whoſe recommendation

[14] Porter's Obſervations, p. 450.

[15] Ibid. p. 451.

or

or diſapprobation becomes a matter of little importance to their future proſpects of ſervice. CHAP. III.

It was very juſtly remarked before, by Sir James, that "a humane concern for the ſafety of his fellow creatures ſuggeſted "to a perſon of approved experience and ability, this obvious "truth, that as the Levant Company was by that law (in 1754, "laying the trade open) become more diffuſed, looſe, and extended, both with regard to navigation and traders, it muſt be "difficult to obſerve ſuch ſalutary regulations as the old merchants had made for ſtopping the progreſs of that fatal diſeaſe the plague, which ſo often prevails in Turkey .... The "new form the charter was thrown into, required new precautions: hence the wiſe citizen above-mentioned, formed "a reſolution to propoſe to parliament the eſtabliſhing good, ſecure, and proper quarantines, with Lazarettos and other conveniencies ..... to receive even infected ſhips without any "danger of ſpreading the contagion[16]." But it ſeems, impediments ariſing to the immediate execution of this plan, a temporary remedy was applied, by a ſummary law, to oblige all Engliſh ſhips from Turkey to perform quarantine; either at Malta or Leghorn[17].

Now from all this it would ſeem, that unleſs matters were brought back to the ſame ſtate as before the alteration in the Company's charter in 1754, equal dependence cannot be held on the regulations, found ſo ſalutary before that period: "the

[16] Porter's Obſervations, p. 383, 384.

[17] The Act here alluded to, was that for enlarging and regulating the trade into the Levant Seas. 26 Geo. II. and includes only ſuch ſhips as brought foul bills of health. The 12th clauſe runs thus: "That no goods or merchandiſe liable to retain the infection "of the plague, and coming from the Levant without *a clean bill of health*, ſhall be "landed in any part of Great Britain, &c. &c. unleſs it ſhall appear to the ſatisfaction of his Majeſty, &c. &c. that the ſaid goods or merchandiſe have been ſufficiently opened and aired in the Lazarettos of Malta, Ancona, Venice, Meſſina, "Leghorn, Genoa, and Marſeilles, or one of them."

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" new form that the charter was thrown into, required new " regulations."

Sir James is confident, in regard to the execution of the old regulations for Turkey ſtill ſubſiſting, that " we may rely on the " Conſuls who are inflexibly exact, and would not fail to give " immediate advice to the Government or Company, in caſe of " the leaſt infraction.[18]."

The regulations of the Levant Company reſpecting quarantines in Turkey, and the precautions enjoined to their eſtabliſhments in that country, in the ſhipping of goods, having been frequently mentioned, I conceive this to be a proper place for giving ſome account of them. They are preſented as they now ſtand in the Company's orders, and, I ſuppoſe, are the ſame alluded to by Sir James Porter, as ſtill ſubſiſting. They were not made all at the ſame time; but are not diſtinguiſhed by dates.

1ſt It is reſolved and ordered, That no ſhip ſhall depart from any port of Turkey or Egypt, without a bill of health, ſigned by the Lord Embaſſador, Conſul, Vice Conſul, or Factor Marine of the place from whence the ſhip ſhall be diſpatched, which bill of health ſhall expreſs the exact ſtate of the health of the place, from the beſt information that can be had.

2d. That all enumerated goods brought from Conſtantinople to Smyrna to be laden for Great Britain, in caſe there was any contagious ſickneſs at Conſtantinople, ſhall be landed at Smyrna, and kept in a ſeparate warehouſe, there to be aired, and not to be ſuffered to be laden till the expiration of twenty-one days after their having been landed: and the factor loading the ſame ſhall accompany them with a proper certificate from the Conſul, of their having been landed and kept there for the ſaid ſpace of time.

[18] Porter's Obſervations, p. 444.

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This order was extended afterwards to goods brought from other places, as well as Conſtantinople, to be ſhipped at Smyrna. CHAP. III.

3d. That no ſhip bound for Great Britain, ſhall be permitted to load at Alexandria, enumerated goods, which ſhall be ſent from Cairo when the contagious ſickneſs is there, though Alexandria is free from it, until the goods ſhall be kept in a ſeparate warehouſe to be aired, and ſuch goods ſhall not be ſuffered to be laden till the expiration of twenty-one days after their being brought to Alexandria; and the factor loading the ſame ſhall accompany them with a proper certificate, from the Vice Conſul, of their having been kept there for the ſaid ſpace of time.

4th. That no clean bill of health ſhall be granted to any ſhip in loading for Great Britain, at any of the ports of Turkey or Egypt, when accidents, or even a ſingle accident of the plague has happened, until the expiration of forty days.

5th. It is nevertheleſs underſtood that ſhips may be allowed to come away from any of the ports in Turkey or Egypt, with ſuch enumerated goods as they ſhall have taken on board before the contagious ſickneſs appeared, each bringing a certificate of his particular caſe and proceeding, from the reſpective Conſul, or Vice Conſul.

6th. That if the contagious ſickneſs ſhall get on board of any ſhip, in any of the ports of Turkey or Egypt, ſuch ſhip ſhall not be permitted to come away for Great Britain, until ſhe ſhall have relanded and aired her goods on ſhore, for at leaſt the ſpace of forty days, and the captain can have a clean bill of health; and the captain ſhall bring with him a certificate of his goods having been relanded and aired.

Theſe, as I am informed, are the whole of the orders, relative to quarantine, made by the Levant Company, and though ſome

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of them are unexceptionable, the whole together form a very imperfect baſis for a practice in Turkey, regarding men and merchandiſe, which is repreſented as equal in exactneſs to the Venetian and French quarantines, and conſidered as a ſufficient ſecurity to Britain, againſt infection of the plague. They appear to me in a very different light; and I ſhall offer a few remarks, that incline me to think them, in ſeveral reſpects, very far from ſuperſeding the neceſſity of ſtrict precautions at home.

The ſecond and third orders being of a ſimilar kind, the ſame remarks are applicable to both. It would appear that goods ſuſceptible of infection, exported from Conſtantinople, or other places, where the plague exiſts, to Smyrna, to be laden for Great Britain, or from Cairo, under the like circumſtances, to Alexandria, ſhall not be ſuffered to be laden until they have performed a quarantine of twenty-one days, during which the goods are to be aired in a ſeparate warehouſe.

For the purification of ſuſpected goods by ventilation, in the moſt favourable ſituation and expoſition, the term of twenty-one days can hardly be reckoned ſufficient; but within the confined walls of a warehouſe, where the air has no acceſs but by the doors and ſmall windows, that goods from an infected place, landed perhaps after a voyage of a week, or leſs, ſhould in three weeks be ſufficiently purified to be ſafely exported to Britain, is inconſiſtent with the univerſal practice of quarantines, in countries where the conduct of them is allowedly beſt underſtood.

Beſides the ſhortneſs of the quarantine, the orders are defective in not preſcribing the mode of airing, and in not empowering the Conſul to ſee it effectually executed. The whole ſeems to be left to the factor, and all that is required of the Conſuls to certify is, that the goods were kept in a warehouſe, and aired the time ſpecified. A ſeparate warehouſe is a ſlender ſecurity, if the porters and embalors employed on the goods, are not likewiſe kept

kept apart, and reſtrained from working promiſcuouſly, as uſual, on goods brought by other veſſels. If the bales are not opened and duly expoſed, they may as well remain in the ſhip's hold, as in the warehouſe; and if the operations on the goods, are not under the inſpection of ſome perſon unintereſted in the deſpatch of the ſhip, and appointed by the Conſul, the airing is likely to be careleſsly performed, and the Conſul's certificate to dwindle into a mere form. CHAP. III.

The fourth order contains an abſolute prohibition, in caſe even a ſingle accident of the plague has happened in the place, to the granting clean bills of health, until the expiration of forty days. I ſhall hereafter have occaſion to animadvert more fully on this article; it is ſufficient at preſent to remark, that ſo rigorous a reſtraint is invariably productive of attempts to conceal accidents in the beginning of the ſeaſon, and to keep the Conſul in the dark.

By the fifth order, a veſſel in port where the plague happens to break out, is permitted to depart with ſuch goods as ſhe ſhall have taken on board before the plague appeared, bringing a certificate of her particular caſe and proceeding, from the Conſul. This order obviouſly required ſeveral ſpecified reſtrictions, to prevent its becoming a ſource of dangerous irregularity. All future communication of the crew, with the ſhore, ſhould have been laid under certain reſtrictions. The reception of parcels of any kind, as well as bales, ſhould have been interdicted, under pain of forfeiting the permiſſion to depart. Letters ſhould not have been received without previous purgation; and, to the ſtrict obſervance of theſe regulations, it ſhould have been no objection, that the Europeans eſtabliſhed on ſhore, had hitherto begun to uſe no precautions for their own preſervation. If ſuch precautions were formerly taken in the ports of Turkey, in times of peſtilence, they would ſeem, from any thing that appears in the Company's orders, to have been diſcretionary on the part of the Conſul and Factory.

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The ſixth order ſuppoſes the infection to have got on board the laden veſſel in port, in which caſe ſhe is not to be permitted to depart for Britain, till ſhe ſhall have relanded her cargo, and aired it for at leaſt forty days, and the captain can have a clean bill of health, together with a certificate of his goods having been relanded, and aired.

Directions relative to men, might have been expected in this order, but on that head it is ſilent. It contains no directions how the perſon infected was to be diſpoſed of; what precautions were to be taken for the preſervation of the reſt of the crew; and how the ſhip was to be purified before again taking in the cargo.

It is defective alſo in regard to the merchandiſe, in not preſcribing when they were to be landed for airing; for if landed before the Conſul could grant a clean patent, that is before forty days after the ceſſation of the plague, the goods might very probably be expoſed to more danger in the courſe of the quarantine, and at the end of it be leſs pure, than if they had remained all the time under the hatches in the hold. This will appear no paradox when it is recollected, that a warehouſe was the Lazaretto, and that there is no reaſon for thinking the porters and others were reſtrained from communicating in the city, or that they were ſhut up with the merchandiſe.

I make no doubt that the prudence of the Conſuls, in former times, formed regulations occaſionally, adapted to contingencies; but ſuch in their nature were liable to variation; they carried not the authority of explicit orders of the Levant Company, and by degrees were likely to be faintly enforced, or to grow obſolete.

Enough has been ſaid to ſhow, that the eſtabliſhed regulations in Turkey are not ſuch as ought in prudence to ſuperſede precautions in Britain, in the reception of ſhips from that country.

I do not entertain the leaſt diſtruſt of the zeal and vigilance of the Conſuls in the Levant, but conceive them, as magiſtrates of health, not inveſted with adequate powers; and know that they have certain difficulties to contend with, which are little underſtood in England, and which perhaps were fewer before the diſuſe of annual ſhips. On this head, I can ſpeak with certainty of Aleppo only: in other places there may be local variations. CHAP. III.

Sir James Porter deems it an error to be more apprehenſive of contagion from goods, than from men; "that when we are certain of the health of the crew of a ſhip, we may make ourſelves eaſy with regard to any fears which may ariſe from the merchandiſe [19]; and that the length of the voyage is a ſecurity againſt the importation of infection, by perſons."

The reaſons aſſigned for the not being apprehenſive of merchandiſe, have already been diſcuſſed; it remains only to examine what has been ſaid of contagion from perſons. "The longer men have been confined together in the ſtagnated air of a ſhip's cabin, the more ſuſceptible will they be of receiving an infection, by ſo cloſe a communication with each other. A voyage from Turkey to England is ſeldom performed in leſs than two months; ſometimes it takes a much longer time: contagion in a ſhip muſt therefore deſtroy two-thirds, or, at leaſt, one-half of the crew [20]."

That contagious diſeaſes, on board of crowded ſhips, make dreadful havock, has too often been experienced in our ſhips of war. The caſe of merchant ſhips is different, their crew conſiſts of a ſmall number, and the navigation of the veſſel requires the men to be much on deck. The complement of men, of one of the laſt annual Turkey ſhips, (of near 500 tons burthen) conſiſted of forty-five, officers included. The notion of ſtagnated

[19] Porter's Obſervations, p. 445.
[20] Ibid. p. 444.

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air of a ſhip's cabin, proceeds from want of experience in ſea matters. There is, in fact, nothing peculiar in the ſea life that can be ſuppoſed to prediſpoſe the body to, or render it more ſuſceptible of contagion[21]. The men in a Turkey voyage have wholeſome diet, good air, and are kept in proper exerciſe. Indeed, ſhould the plague, in the courſe of the voyage, happen to ſeize any of the ſailors, much is to be apprehended from the cloſeneſs between decks, where the common men ſleep; but the riſk incurred by the others, ariſes not from their being prediſpoſed to infection by their diet or confinement; it conſiſts in their lodging too near the infected body. But even in caſe of the plague appearing on board, it does not follow that two-thirds, or at leaſt one-half of the crew muſt neceſſarily periſh. The diſtemper will not ſpread at ſea, more than on ſhore, without a concurrent diſpoſition in the air; and, by early precautions in the beginning, its progreſs may perhaps be ſtopped more effectually on ſhip board than on ſhore. In Chataud's veſſel, which brought the plague to Marſeilles in 1720, ſix perſons only died on the paſſage; in the Tartan, which brought it to Meſſina in 1743, one or two only of the ſailors died in the paſſage from the Morea.

But the healthineſs of the ſhip's company is no indication of the ſtate of her cargo, with which moſt probably they may have had no communication the whole of the voyage. When the complete crew and paſſengers arrive in good health, there is certainly very little to be apprehended from their perſons, or even from the apparel which had been in daily uſe on the voyage, as they may be ſuppoſed ſufficiently purified by ventilation. But the caſe is different with clothes, and other things, which have remained in cloſe packages from the time they were ſhipped; and which, being in the ſame predicament with the cargo, ſhould be ſubject to a ſhorter or longer quarantine, according to circumſtances.

[21] In the Rational Enquiry into the Plague, by a Dr. Pringle, a ſuppoſition of this kind is aſſumed, "If the perſons on board, who by their diet and cloſe confine-" ment are more ſuſceptible of infection, come into port in good health," &c. p. 9.

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I have now conſidered fully the whole of what has been offered on the ſubject of contagion by Sir James Porter, except what is ſaid of the preſent mode of performing quarantine in England, and that will come in with more propriety hereafter. It would have been more agreeable to me, to have communicated my remarks privately to himſelf, than to produce them in their preſent form; but I did not arrive in England till after the publication of Sir James's book. I however judged it proper to rectify ſome miſtakes reſpecting Syria; and not to paſs unnoticed ſome opinions which, ſo far as they encourage a reliance on inadequate means of preſervation, ſeemed to me of dangerous tendency. At the ſame time I conſidered it as implying no reflection on Sir James's memory, that a perſon in his ſtation, ſhould have fallen into ſome errors, through miſinformation, in matters out of his own line. CHAP. IV.

CHAP. IV.

Facts ſtated, relative to the progreſs of the plague at Aleppo, 1761—The natives conſtantly attempt to conceal the diſtemper from the Europeans—Hence requiſite information, as it reſpects bills of health, is obtained with difficulty.

WHAT I am about to offer on this head being chiefly the reſult of experience and obſervation in Turkey, I conceive it proper to bring together in one view, ſome facts relative to the commencement and termination of the plague at Aleppo of 1760, which have been before mentioned diſperſedly in the Hiſtorical Journal[1]. It is partly upon theſe facts that the regulations to be propoſed are grounded.

[1] Book 1. chap. v.

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The plague made its appearance in ſeveral of the maritime towns of Paleſtine and Syria, towards the end of the year 1759. Early in the ſpring of 1760 it reached Damaſcus, where it raged all the ſummer. About the middle of May it reached Aleppo, making its firſt appearance in two or three Armenians, who were employed as porters of one of the public khanes, and were ſuppoſed to have caught the infection of a Turk merchant from Damaſcus, whoſe ſores were yet open, and who, in company with two or three other travellers, had lodged ſome days in the khane on his way to the north.

The three Armenians died, in the courſe of ſix or ſeven days, one after the other. But though this happened within a hundred yards of the Engliſh conſular-houſe, the Europeans, in all probability, would have heard nothing of the matter, had not the death of the firſt, and the ſuſpicious condition of the other two, come accidentally to my knowledge, and induced me to ſift the report by viſiting the ſick[z].

Conſidering the ſtate of ſome of the ſea-port towns, and of Damaſcus, where the plague had already made conſiderable progreſs, together with the interval unuſually long that Aleppo had remained free from the plague, there was little reaſon to expect it would eſcape a viſit in the ſummer. But there being no ſhips on departure, or at Scanderoon, the early diſcovery of the plague in the city was of no further conſequence to the Engliſh factory, than to put them on their guard, againſt the uſual practice, of the natives, of concealing the plague; and to ſuggeſt a caution againſt extending mercantile engagements, which the increaſe of the diſtemper would eventually interrupt. In reſpect to meaſures for their perſonal ſafety, they are ſeldom thought of till the plague has made ſome conſiderable progreſs, or is known to have approached the European quarter of the town.

[z] See Caſe I. and II. Appendix, and Hiſtorical Journal.

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Under theſe circumſtances, I judged it beſt to give private information to the Conſul, leaving it to him to communicate it to the gentlemen of the ſettlement; and, being aware of the popular odium incurred by the author of a firſt alarm of ſo diſagreeable a kind, I determined to preſerve ſilence on the ſubject, in the ordinary courſe of my viſits among the natives [3].

To the death of the third porter, on the 23d of May, an interval of eight days ſucceeded, in which no new accidents were heard of; and what had happened to the porters was aſcribed to another cauſe. This pauſe gave probability to the imputation of my having miſtaken the diſeaſe, and ſubjected me to cenſure from the public for indiſcretion. But had there been a caravan then on departure, my ſituation would have been much more diſagreeable; the Conſul would have refuſed granting a clean patent, and I ſhould have been accuſed of doing an injury to the merchants, by officiouſly interpoſing unaſked.

The calm however in the end of May was deceitful, ſeveral accidents happening at that time, which were not known to the Europeans. By the 4th of June, my account of infected perſons in the city, amounted to ſixteen; but ſome of thoſe were convaleſcents lately come from Damaſcus, or other places.

[3] Having preſerved copies of my letters to the Conſul, relative to the commencement and termination of the plague, I ſhall ſubjoin extracts of them to ſhow on what ground patents were refuſed or granted at that time.

Aleppo, May 22, 1760.

To William Kinloch, Eſq.

SIR,

I AM ſorry to inform you, that my ſuſpicions concerning the plague, with which I acquainted you this afternoon, have proved true. The people are actually infected; a bubo I diſcovered in one of them this evening, together with other circumſtances in their caſes, leave no longer room to doubt the nature of their diſeaſe. With reſpect to the gentlemen of our factory, you will pleaſe to make uſe of this intelligence in the manner you ſhall judge proper, my having communicated it in this manner to you will excuſe my ſilence on the ſubject to-morrow, when I propoſe making my viſits as uſual in the city.

I remain, &c.

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The progreſs of the diſtemper, till the middle of June, was very ſlow, and ſo many of thoſe immediately employed about the ſick eſcaped infection, that people continued to deceive themſelves with hopes of its not being the plague; which they thought muſt have ſpread more rapidly, and infallibly have attacked the nurſes of the ſick: an unfortunate prejudice, the ſource of infinite miſchief in all countries. The increaſe of the diſtemper through the latter fortnight of June, rendered the Europeans more cautious in walking about in the city, but they did not judge it neceſſary to ſhut up, till the beginning of July. The plague diſappeared in Auguſt: and I find by my papers that applications for bills of health were made to the Conſul the beginning of October [4].

During the winter of 1760, I neither met with, nor heard of any peſtilential accidents; but it was generally apprehended the diſtemper would return next year. In this interval, the merchants were buſy in providing a cargo for a ſhip which they purpoſed to diſpatch early in the ſpring; but flattering themſelves all was over, or if the diſtemper ſhould return, that it would be late in the ſeaſon, the departure of the caravan for Scanderoon was procraſtinated from day to day, till the 31ſt of March.

From an apprehenſion of what afterwards happened, I had requeſted the Conſul to endeavour, by his Druggomen, or others,

Aleppo, Oct. 6, 1760.

[4] To William Kinloch, Eſq.

SIR,

IN obedience to your requeſt this day, I have examined my journal of the late plague, and find the laſt inſtance of infection which fell under my own obſervation happened the 15th of Auguſt; and from the beſt information I was able to procure, that no perſon has been infected later than the 19th or 20th of that month. As I did not decline viſiting the infected, and have continued the ſame methods of procuring intelligence which I had employed from the beginning, I think there is reaſon to believe that the plague ceaſed in this city about the 20th of Auguſt. I remain, &c.

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to procure intelligence for his regulation in granting patents; as I did not wiſh to expoſe myſelf to the obloquy I had incurred the preceding year, more eſpecially under circumſtances which rendered the chance of incurring it much greater. But he fairly declared that, from what he had ſeen already, he found no reliance, in ſuch matters, was to be placed in the Druggomen; that he was determined not to grant patents, without previous application to me, and if he found me declining or heſitating to give an opinion, he would cut the matter ſhort at once, by putting a ſtop to clean patents till Midſummer.

Through the autumn and winter, I had conſtantly employed the means before-mentioned in the Journal for procuring intelligence; and had myſelf continued to viſit the natives, in moſt quarters of the town and ſuburbs. I had therefore good reaſon, in March, to think them ſtill free from the plague; and on that ground returned anſwers to the enquiries frequently made by the gentlemen of the ſettlement, concerning the health of the city.

In the evening of the 29th of March, one of the perſons employed to collect intelligence, came to acquaint me, that he had for ſome days paſt heard reports of the plague, but deferred bringing them till he ſhould be able to come at ſome certainty. That he had been, that afternoon, at a houſe near the Horſe-market, where he found a man lying extremely ill, with a bubo in his groin; that ſeveral others lay ſick in an adjacent Keiſaria[5], from whence a number, that to him appeared incredible, were ſaid to have been buried within the laſt fortnight. This information, of the truth of which I had very little doubt, did not much ſurprize me. I had all along looked upon the return of the plague as certain, but the ſudden declaration of it at ſo critical a conjuncture, the caravan for Scanderoon being to ſet out early next morning, I knew would be ſubject to many comments.

[5] By Keiſaria is here meant a number of mean houſes, built round a large encloſed area.

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The affair, as it then ſtood, was of a nature not to be concealed from the Conſul; the bare ſuſpicion was ſufficient to vitiate the patent. The only chance of preventing a ſcene of confuſion was, that of finding the diſtemper, of which the people then lay ill, not to be the plague; but as ſuch a point could not ſo effectually be ſettled as by viſiting the ſick myſelf, I determined to go privately to the place, by ſun-riſe next morning. The reſult of this viſit will appear from the caſes marked below[6]; and from a letter written to the Conſul, immediately on my return home[7].

I requeſted the Conſul, for obvious reaſons, not to give me up as the author of his intelligence, for at leaſt ſome days. But in the aſſembly of the merchants, which was ſummoned the ſame afternoon, and in which he declared his not being at liberty to grant clean patents, ſo many inſinuations were thrown out of the poſſibility of being impoſed upon in his information; of the hardſhip of ſtopping the deſpatch of the ſhip upon envious or intereſted ſurmiſes, which the Conſul's ſhort reſidence in the country had not yet led him to be aware of; ſo much ſtreſs was laid on my having declared to every body, two days before, that I had heard nothing of the plague; and he was ſo ſtrongly urged to ſend for me, before coming to a reſolution ſo detrimental to their affairs; that, after reſiſting ſome time, he was at length

[6] Caſe VIII. and IX. Appendix.

[7] To William Kinloch, Eſq.

Aleppo, March 31, 1761.

SIR,

I AM ſorry to inform you that, within theſe laſt eight days, ſeveral perſons within the walls of this city have died of the plague. My intelligence of this fact is accompanied with all the circumſtances of certainty that matters of ſuch a kind can well admit of; and in the ſame place where thoſe perſons are ſaid to have died, there are now, to my certain knowledge, ſeveral others lying ſick of the plague, with ſymptoms ſo unequivocal, that there remains no doubt of the reality of the diſeaſe. I am, &c.

forced

forced to depart from his promiſe, and to tell them it was wholly unneceſſary I ſhould confirm in their preſence, what I had already given to him under my own hand. CHAP. IV.

In the firſt moments of diſappointment, I was blamed for not giving information to the merchants, before the Conſul; and ſome conceived I had been officiouſly buſy, in ſaying any thing at all to the Conſul, before being aſked. It was not then known that I myſelf had not been ten hours in poſſeſſion of the information, before I took the moſt effectual meaſures for preventing impoſition; and, when the fact was aſcertained, of communicating it to all. Nor was it recollected that concealment for a few days, of what muſt have inevitably been known when a patent was required, might have involved their affairs in ſtill worſe embarraſſment; eſpecially if any part of the goods had been put on board of the ſhip, which had taken in part of her cargo at other ports.

The gentlemen of the ſettlement, on retiring from the aſſembly, had been enjoined not to mention my name; but it was impoſſible to conceal the refuſal of clean patents; and the conſternation in the city became general, among thoſe connected with the Europeans. The warehouſemen and other ſervants, not knowing whence the information came, were poſitive the Conſul had been impoſed upon; affirming it (plauſibly enough) to be impoſſible the plague ſhould exiſt in the place, without one or other of them hearing of it. They perſiſted in this for ſeveral days; and pretended that all the native doctors concurred in there being no plague.

Notwithſtanding my precautions, my viſit at the Keiſaria had not paſſed unnoticed. It happened that I was obſerved going to the place, by the ſlave of an eminent Turk merchant, who, thinking the hour unuſually early, mentioned the having ſeen me to his maſter. Two or three days after, the merchant being

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at the Mohaſſil's[8], who was at that time temporary governor of the city, the plague was mentioned in the courſe of converſation; and ſurprize being expreſſed at the unexpected ſtep taken by the Engliſh Conſul, the merchant communicated the information of his ſlave to the Mohaſſil, adding, that ſomething probably might be learnt from me, if queſtioned privately; for though I pretended to know nothing of the matter, it was ſuſpected the Conſul muſt have had his intelligence from me. The Mohaſſil accordingly ſent for me, and, after premiſing the conſequence it was to him, in regard to the public revenue, to know the likelihood there was of a plague that year, deſired to know, if I could inform him, the Conſul's motive for refuſing bills of health. In anſwer to this, I explained the neceſſity the Conſul was under of acting as he did, and confeſſed I myſelf had given the information. I told him, at the ſame time, my reaſon for declining the ſubject in common converſation was to avoid a repetition of the clamour he knew had been raiſed againſt me the year before. He returned me thanks; and I had cauſe in the ſequel not to repent the confidence placed in him[9].

The popular notion of there being no plague, prevailed during the firſt ten days of April; the Europeans being ſtill aſſured by their ſervants, that they had taken particular pains in making enquiry, without being able to trace any thing of the diſtemper. At length they were brought to acknowledge, that in the month of March, ſeveral perſons had died in a certain Keiſaria; people not of Aleppo, but ſtrangers from other places; that the mortality had ceaſed, and nothing more remained of the diſtemper. This being confidently aſſerted as the reſult of ſuch enquiry, was

[8] Farmer of the Revenue.

[9] One of the people employed by me to procure intelligence, and ſuſpected of being too-active in the exerciſe of his duty, was, under ſome other pretence, thrown into priſon; but immediately liberated on my application, and the example proved afterwards a protection for all the others whom I retained in my ſervice.

believed by many; and incredulity, in reſpect to the plague, prevailed pretty generally till the beginning of May. CHAP. IV.

In the mean while, theſe pretended enquiries were either negligently conducted, wholly fictitious, or thoſe in whom ſome of the Europeans placed confidence were guilty of moſt unjuſtifiable deceit. For, in the firſt place, prior to the information given to the Conſul, above forty perſons had been buried from the Keiſaria, and a number, ſomewhat leſs, from an Arab camp near one of the city gates[10]: in the ſecond place, the people of the Keiſaria were not ſtrangers arrived lately, but inhabitants, and moſt of them natives of Aleppo; and laſtly, ſo far from the diſtemper having ceaſed, it ſtill ſubſiſted in the places where it had firſt appeared, and there were daily peſtilential funerals, all the month of April.

From what has been now ſaid, as well as from the Hiſtorical Journal, it appears what little credit is due to the reports of the intereſted part of the natives, in the beginning of a plague. But it may juſtly be thought ſtrange how facts, ſuch as have been ſtated, could paſs unnoticed by thoſe in the vicinity of infected houſes; and why perſons, not connected with commerce, and who had nothing to loſe by the communication, ſhould be reſerved, when matters of that kind came to their knowledge. In anſwer to the firſt, it may be remarked, that the unuſual mortality, in the laſt ten days of March, did not eſcape the notice of the people in the neighbourhood of the Keiſaria, nor did they affect to conceal it; and information in other parts might have been obtained by any one, by going, as I did, to the ſpot. Neither was what paſſed in other parts of the town unknown, eſpecially to the women, nor were they ſhy in talking of it. But the perſons dependent on trade and manufacture, who compoſe a numerous claſs of the inhabitants, and are diſperſed in moſt quarters of the city, check the ſpreading reports of the plague; and

[10] Hiſtorical Journal.

the

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the Chriſtians and Jews, who have acceſs to the Europeans, are in this reſpect very aſſiduous.

In regard to ſuch of the Turks who have no concern in trade, they have no intereſted motive for concealing what they hear; but politely abſtain from propagating reports which they know to be unpleaſing, and which may happen to prejudice others in their affairs. The conduct of the Chriſtians of the upper claſs is more readily accounted for; moſt of them, or their relations, are engaged in commerce, and a confirmation of the plague's exiſtence affects, more or leſs, the whole nation. The year 1761 affords a ſtrong example of their conduct at ſuch times. At the cuſtomary ceremonial viſits on the Feaſt of Eaſter, nothing was heard but congratulations on the extinction of the plague; an event, however, which was by few believed, and by many known to be not true. The maſter of the houſe knew very well he might ſafely aſk his gueſts, aſſembled from different quarters of the town, what news they had of the plague. Every one was prepared to thank God he had heard of no new accidents, for many days. Thus, in proportion to the number of his viſitors, he was enabled to produce evidence for a fact, which he himſelf knew was falſe. If the plague were really in the city, how was it poſſible ſo many as had been to viſit him, ſhould know nothing of the matter? A declaration of this kind procured him a more welcome reception where he returned the viſits, and thoſe who heard him, were authorized in their reſpective circles to diſſeminate equivocal untruth with a ſafe conſcience.

In the mean while it is of obvious importance that the Conſul, who has the ſole power of granting bills of health, ſhould have the earlieſt and beſt intelligence of the appearance of the plague in the city, or in its vicinity: but how is this intelligence to be obtained, in a country where he can expect no aſſiſtance from the police; and where there is a perpetual combination to conceal matters

matters from his knowledge as long as poſſible[11]. The only perſons he can apply to are his druggomen or interpreters, and there are ſeveral reaſons for their not wiſhing to interfere. It is an invidious office to communicate vague reports, which may diſturb the public tranquillity, and it is out of their line to aſcertain ſuch facts as they may accidentally hear of. Yet ſuch are the only reports to be expected in the beginning of the ſeaſon, when the characteriſtic marks of the plague are very often abſent, or concealed. The interpreters, well knowing that a communication, under ſuch circumſtances, would be execrated, as highly officious, naturally ſtand aloof, and rather avoid than encourage information. CHAP. IV.

When accidents multiply, or chance brings them to be talked of in a way that muſt reach the Conſul, how is he to know that ſuch are really the plague? reports for the moſt part being contradictory. There is no medical perſon officially obliged to viſit the ſick; and, if a native practitioner of phyſic were to be employed, his report on ſeveral accounts would be ſuſpicious; if favourable, it would be alleged he was afraid of popular reſentment; if otherwiſe, that he was corrupt or ignorant.

In the end of the ſeaſon, the Conſul finds himſelf under equal, if not more embarraſſment, it being more difficult to affirm, of a

[11] From the repreſentation of the Smyrna merchants, in their letter to the late Mr. Howard, it would appear that the Conſul of Smyrna is leſs liable to have matters concealed from him, than to be miſled by fictitious reports of a plague, when none actually exiſts. It would ſeem that the Conſul there is determined, in granting clean or foul patents, by the reports he receives from the Greeks, to whom he is under the neceſſity of applying for information; becauſe nothing on the ſubject, to be depended upon, can be procured from the Turks. But as many of the Greek merchants trade directly to Leghorn, and other ports, in the ſame commodities which are exported to England, it often becomes their intereſt to raiſe falſe alarms of the plague, in order to impede the diſpatch of the Engliſh ſhips; which, being under the neceſſity of waiting forty days for clean patents, the foreign ſhips gain the important advantage of bringing their cargoes to the European markets much ſooner. At Aleppo, few or none of the native merchants carrying on any commerce directly to Europe, there is no temptation to ſuch practices.

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large town, that the diſtemper has ceaſed, than it was in the beginning to pronounce ſuch and ſuch particular accidents to be the plague. The uſual practice is, that the Conſul marks down the laſt inſtance which comes to his knowledge, and, at the expiration of forty days from that date, conſiders himſelf at liberty to grant bills of health, which are reckoned clean. But if his information be merely fortuitous, or derived from no one who is reſponſible for negligence in enquiry, ſuch patents reſt on a very precarious foundation.

It will appear from what has been ſaid, that the Conſul, as magiſtrate of health, is not provided with adequate means of obtaining neceſſary information; and that he is obliged to act under ſeveral diſadvantages. That he is liable to be miſled, on one hand, to the prejudice of commerce, by fictitious rumours; and, on the other, to endanger the health of his mother country, by a declaration, reſpecting the health of the place of his reſidence, founded on intelligence in which he has been equally, but in its conſequence more materially, deceived.

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Hardſhips to commerce reſulting from the preſent regulations in Turkey—Little ſecurity to Britain derived from them—Regard ought always to be had to the convenience of merchants, in framing orders for quarantine—Bills of health, on their preſent footing, defective and inſecure—Trade ceaſes during the rage of the plague, but is reſumed too early in its decline.

BY an order of the Levant Company, no ſhip ſhall depart from any port of Turkey or Egypt, without a bill of health; and, by a ſubſequent order, no clean bill of health ſhall be granted

to

to any ſhip in loading for Great Britain, at any of the ſaid ports, when accidents, or even a ſingle accident, of the plague has happened, until the expiration of forty days.

Had a Caravan, in the year 1760, happened to be ready to ſet out from Aleppo in May, a few days before the plague broke out on the 22d of that month, the ſhip could no more have obtained a clean patent than in the following year; yet circumſtances were widely different. In the former year the city, and its environs, had remained many years free from all ſuſpicion of plague; the ſilk and other merchandiſe had been purchaſed and packed up, before any ſuſpicion aroſe. In the latter, at leaſt part of the cargo muſt have been provided, though perhaps not cleaned or packed, not only in ſuſpicious times, but even when the plague actually exiſted. If it was a hard caſe in the ſecond year to reſtrain the merchant's property from exportation, it ſurely would have been much harder in the firſt.

Again, the goods ſuppoſed to be reſtrained in the ſpring of 1760, and which had remained in warehouſe all the ſummer and autumn, became entitled to be exported in the winter, forty days after the ceſſation of the plague: and, what is more, I know of no cuſtom or regulation that prevented the merchants, after their coming out from confinement, the latter end of July, from providing or completing a cargo, which they might legally have deſpatched the beginning of October.

The year 1761, affords an example ſtill ſtronger. The plague ſpread more conſiderably than in the preceding year, the Europeans were longer ſhut up, and the ſilk, as well as other commodities, muſt have been provided during the time of the plague. But had the contagion ceaſed, as was expected, in Auguſt, there could have been no legal objection to bills of health in October: as it happened, the plague did not ceaſe in the autumn.

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On the termination of the plague in 1762, the goods to be exported, conſiſted of ſuch as had been ready for exportation in the month of March, 1761, and of ſuch as muſt certainly have been provided either during the plague, or in the ſhort interval between the middle of September and beginning of November. The requiſition of clean patents, in November, muſt have been complied with by the Conſul, notwithſtanding part of the goods were what had been prevented from being exported in 1761, and part had been provided when the ſilk countries, as well as Aleppo, were actually, or very recently had been, viſited in a much higher degree by the plague than in the former years.

It may be thought that the regulations alluded to by Sir James Porter had made ample proviſion for all this; that the goods prevented from being exported in 1761, muſt have been opened and aired, before their being ſhipped in 1762; that the merchants were either prohibited from making purchaſes, in the circumſtances deſcribed, or, for their own ſakes, would abſtain from ſo doing. But we have already ſeen that the orders of the Levant Company reach not the caſes now ſuppoſed; and I ſhall only remark further, that whatever may be the practice in other parts of the Levant, or whatever may in former times have been the practice in Syria; the goods in queſtion were neither opened nor otherwiſe purified; the merchants did not conſider themſelves reſtricted from making purchaſes, when or where they judged fit; nor did the Conſul conſider himſelf inveſted with any power to interfere in ſuch matters. As to the merchants abſtaining from commerce for the ſake of their own preſervation, I do not believe any of them in the height of the plague ventured communication, or to receive goods[1]; but before ſhutting up, and after

[1] Though the Engliſh are not, other nations are ſuſpected of riſking a dangerous commerce at ſuch times, with what juſtice I cannot pretend to know. "Il faut "ſcavoir que les marchands de Marſeille ont des correſpondans dans chaque echelle "du Levant, qui ont ſoin de prendre leur meſures à propos pour faire les achats au "meilleur

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after coming out from confinement, though in both cafes the plague, in ſome degree ſtill ſubſiſts, the danger of communication is variouſly eſtimated, and the merchants abſtaining from, or immediately engaging in commercial intercourſe, depends upon circumſtances very different from conſiderations of perſonal danger. It is true, the ſilk from infected places, or purchaſed in ſuſpicious times, muſt be cleaned and repacked at Aleppo, and if any accident ſhould happen among the perſons employed in thoſe operations, it would prove a new impediment to bills of health: but it is a very raſh inference, that nothing is to be apprehended from merchandiſe tranſported at ſuch times to other countries, when the workmen employed on them in Turkey happen to eſcape unhurt.

In framing regulations for quarantine, it ought to be a leading principle, as far as may be conſiſtent with the public ſafety, to avoid multiplying the reſtraints and embarraſſments of commerce. In times of ſuſpicion and of peſtilence, the merchants are unavoidably ſubject to many delays, vexations, and loſſes; it were cruel, as well as impolitic, to ſuperadd reſtrictions, either unneceſſary, or inadequate to the intended purpoſe. A regulation that renders every patent inadmiſſible in England, except what declares the place where the ſhip was loaded to have been free from the plague, or ſuſpicion of the plague, for the ſpace, at leaſt, of forty days, I am inclined to think will be found, in both reſpects, of this kind. Two or three accidents in the beginning of the ſeaſon, taints a bill of health equally as five hundred would

" meilleur marché qu'ils peuvent. Le temps de la contagion eſt très propre pour " faire ce qu'ils appellent de bons coups, parceque le commerce des etrangers ceſſant " dans ces ſortes des occaſions, ce deffaut fait baiſſer les marchandiſes, & ils en " profitent pour faire des Amas. Quand ce temps eſt paſſé, les Vaiſſeaux vont faire " leur chargement, & comme la contagion paroît avoir ceſſé, *ils partent avec une* " *patente nette, & des ballots empeſtés.* Or, comme l'on n'uſe pas dans les infirmeries " de la méme rigidité à l'égard de ceux qui arrivent avec patente nette, qu'on prat- " tiqueroit envers ceux qui l'auroient brute, il eſt aiſe' de juger des conſéquences que " cet abus peut avoir." Traité de la Peſte, part ii. p. 184, 205.

do;

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do; and a patent declaring the place free for forty days, though the plague had raged there for ſeveral months immediately preceding the quarantine, is reckoned as clean as if the place had remained uninterruptedly free for ſeveral years.

There would ſeem to be two principal defects in the conſtruction of bills of health[2]. The one in requiring the Conſul to declare abſolutely that the plague is, or is not, in the place; the

[2] I ſhall here ſubjoin an abſtract of a bill of health from Cyprus, dated in the year 1735, when the Levant Company was on the ancient eſtabliſhment. I have none within my reach from other places, or of a later date; the Quarantine Act, in 1753, made no alteration in the form.

"We Stiles Lupart, Eſq. Conſul, &c. Do give full and undoubted teſtimony "and atteſt to all Honourable and Excellont Lords, Commanders, and other Offi- "cers by ſea, to whom theſe our preſent letters ſhall come, that there departed from "this town and port of Salines, the Britiſh ſhip called Delawar, commanded by "William Cleland, for the voyage of London, with his mariners to the number "of forty-five, including the captain and officers, who are Britons, and the ſhip "belonging to Britiſh owners; and we further atteſt to all Honourable Magiſtrates "or other Officers upon the Office of Health, in Chriſtian parts, that, by the grace "of God, in this iſland and kingdom of Cyprus, there is, and for more than three "years paſt has been, perfect health, and the inhabitants free from all ſuſpicion of "plague or other contagious diſtemper, which is made known. In witneſs whereof "we have ſet our hand, and cauſed the accuſtomary ſeal of our Cancellaria to be "affixed hereunto. Given at our Reſidence in Larnica of Cyprus, the 26th Day "of February, &c. &c.

A ſeparate Bill of Health, for a paſſenger on the ſame ſhip, runs nearly in the ſame ſtile, in Italian. "Atteſtiamo - - - qualmente Il latore di queſta é H Signor "P - - H - - gentilhomo Ingleſe ſi imbarcha ſopra La Nave - Delawar - - - per il "viaggio deſtinato, a Iddio piacendo, per Londra. Atteſtiamo anche - - - qualmente "in queſta Iſola ſi vive, per la Iddio gratia, con ottima ſalute, & ſenza ſoſpetto "alcun di mal contagioſo che ſi ſia per piu da tre Anni paſſati, Il che vi ſia "noto, &c. &c.

It may be remarked here, that the Engliſh patent declares the place to be free, not only from the plague, but from all contagious diſorders whatever, which is much more than was neceſſary; for ſmall-pox, meaſles, or even petechial fevers, common on the coaſt, were never reckoned impediments to a Bill of Health.

other in excluding a detail of circumſtances, indicating ſuſpicions of more or leſs weight, where certainty, which inevitably muſt be ſometimes the caſe, cannot be obtained. CHAP V.

In reſpect to the firſt, where the city and adjacent territory have remained free for a year or two, a Conſul may, without heſitation, grant a clean patent in the uſual form; but after a plague has been raging in the town for many weeks, it ſeems rather unreaſonable, in a matter ſo difficult to be aſcertained in a populous town, to exact an inconditionate declaration, as indiſpenſable to conſtitute a clean patent; and to lay him under the neceſſity of deeming all ſuſpicious circumſtances indiſcriminately ſufficient to conſtitute a foul one. The public health is endangered by the firſt, the property of the merchant very unneceſſarily tied up by the ſecond.

The other defect in the bills of health might be remedied by the admiſſion of middle patents, between the clean and foul, reciting ſuſpicious circumſtances, or the reputed ſtate of adjacent towns, which it may happen not to be in the power of the Conſul to aſcertain. Theſe, by foreign nations, are admitted under the title of Touched Patents, *Patentes Toucheés*; and tend greatly to facilitate the adminiſtration of a Conſul, as a magiſtrate of health.

The foul patents I need ſay nothing of, as they ought to continue to be inadmiſſible in England, till ſuch time as a regular Lazaretto ſhall be eſtabliſhed, for the reception of ſhips that bring them; but the middle kind, which at preſent are equally inadmiſſible, might be ſafely received in England, under ſome little improvement of the precautions uſually practiſed there. A ſhip departing from Aleppo the end of May, 1760, might, on that ſuppoſition, have brought a touched patent, and, for reaſons to be aſſigned hereafter, I think a ſhip deſpatched early in the ſpring of 1761, before the reappearance of the plague, ſhould have been conſidered as ſtanding in the ſame predicament, though

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though intitled to, and actually would have brought, a clean patent.

The admiſſion of ſhips with middle or touched patents, at preſent wholly prohibited, would not only in ſome degree be a relief to commerce, but I am perſuaded would conduce more to the public ſafety than the preſent reſtriction. As this may appear a paradox, I ſhall endeavour to explain it.

He muſt entertain an ill opinion of mankind who can believe any merchant, in the Levant, from lucrative motives, would riſk the health of his country, by exporting merchandiſe when the plague was raging in the place; or under the conviction of his own mind, that his commerce, highly advantageous as it might be to himſelf, might in the event involve thouſands of his fellow creatures in miſery. But very different opinions of the probability of ſuch conſequences prevail in England and in the Levant, eſpecially in the beginning and decline of a plague. What would excite dreadful apprehenſions univerſally in London, cauſes very little alarm in countries more accuſtomed to be viſited by the plague. Perſons in the Levant, as I have repeatedly had occaſion to remark before, ſeldom have recourſe to meaſures for their own protection till the diſtemper has conſiderably advanced; and trade, which is often little interrupted before the ſhutting up, is frequently reſumed almoſt as ſoon as the warehouſe doors are thrown open. There, no doubt, are exceptions to this, to be found in the more wary conduct of ſome individuals; but the practice is far leſs uncommon than perſons, deliberately ſpeculating in Britain, would eaſily be perſuaded to think probable.

The notion prevalent in Turkey, that little is to be apprehended from contagion early in the ſpring, or in the decline of the plague in the autumn, contributes to maintain the practice of concealing peſtilential accidents as long as practicable. The

leſs that is ſaid about them, think the natives, the leſs chance there is of their coming to the ear of the Conſul; and if things can be huſhed up till after the deſpatch of the ſhip in port, they conceive no harm can ariſe from the concealment. I am far from inſinuating that the merchants directly connive at intrigues of this kind; on the contrary, I have often known them deceived by their ſervants. But it is very natural for them to wiſh the arrangements they have made ſhould not be interrupted, and to be remiſs in ſearching for what they dread to find. Unpleaſing reports, tranſient, and often contradictory, are apt to be diſbelieved, or only leave ſlight impreſſions; and, in deliberating on conſequences, where the problematical riſk of the plague being exported is put in one ſcale, and the certain loſs, from a long detention of property, is put in the other, the merchant immediately intereſted in the deciſion ought to have ſteady nerves, who would truſt himſelf to hold the balance. CHAP. V.

In the mean while the practice of concealing peſtilential accidents, with a view to prevent the interruption of trade, or the deſpatch of ſhips to Europe, often proves detrimental to the merchants themſelves, and ſeldom proves thoroughly ſucceſsful. It proves detrimental, by leading the merchant, deceived by fallacious hope, to enlarge his inveſtments, and to procraſtinate the departure of his ſhip, which, if he had had good intelligence, might have been ſafely deſpatched with the goods long before ready, and a large part of the cargo have got home, inſtead of the whole being tied up for many months, for the ſake of a few lingering bales. This was obviouſly the caſe in 1761; for a caravan might have been deſpatched in February, had not ſome circumſtances, relative to other places not far diſtant, been ſuppreſſed, and ſome intelligence which was received, been too much diſregarded.

The ſtratagem alſo, from the nature of the thing, muſt often prove unſucceſsful; ſucceſs depending leſs on the number of peſ-

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tilential accidents to be concealed, than on the Places where they happen, and the quality of the perſons who are the ſubjects of them.

The riſk ariſing from the chance of ſhips being deſpatched with clean patents, when the plague actually exiſts in the place, is aſſuredly not ideal; and no argument will avail with the natives againſt concealment, whereby ſuch patents may be obtained, till a greater latitude be admitted. Till the temptation to deceive be leſſened, and truth be encouraged to come forward, by an aſſurance that circumſtances candidly expoſed, might often obtain a patent, by which the ſhip, on her arrival, would not be ſubject to a reſtraint much longer than if the patent were clean: inſtead of an embargo, grounded ſometimes on diſtruſt that matters are worſe than they really are.

As things ſtand at preſent, bills of health are not entitled to that degree of credit they ought to have. A clean patent, at certain times, brings, in reality, leſs ſecurity to the kingdom than one touched, or expreſſive of ſuſpicion. The one puts the council of health on its guard, the other lulls it into imaginary ſecurity: and, as long as clean patents only are admitted in England, it may juſtly be apprehended that, under the maſk of that title, ſuch as in truth ought to have been reckoned touched, if not foul, will ſometimes find their way, in ſpight of any thing in the power of the Conſuls abroad, under the preſent conſtitution, to hinder.

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Bills of health, or patents, ſhould be admitted under two denominations, clean and touched—The clean, ſo reckoned, ought ſometimes to be deemed touched—Inſtructions to Conſuls—Practical examples, ſhowing the expedience of admitting touched patents—Neceſſity of ſupplying the Conſuls with better means of information—Eſtabliſhment of ſurgeons propoſed—Inſtructions to ſurgeons.

IN the Quarantine Bill preſented to the Houſe of Commons, by Lord Barrington, on the 8th of February, 1753, it was propoſed to be enacted, "That our Conſuls abroad, reſiding in any part of the Ottoman dominions, or in any other port, when his Majeſty, ſhould ſo order in Council, ſhould ſee that the maſter of every ſhip which ſhould touch at any place within his conſular diſtrict, ſhould, at the coſt and charges of the ſaid maſter, be provided with a Yellow Jack, with a Swallow Tail; and ſhould ſign and deliver to every ſuch maſter, upon reaſonable requeſt, a bill of health, and manifeſt, certifying the quantity and quality of all goods taken on board, at what time the laſt peſtilential contagion, or ſuſpicion thereof, began; what number of perſons were ſuppoſed to have died of the plague; and when it apparently ended within his juriſdiction."

Various objections being made to the yellow jack, that clauſe was rejected; and in the act, nothing is contained, reſpecting bills of health, further than that every maſter of a veſſel, on his arrival at the place appointed for quarantine, ſhall deliver ſuch bill of health and manifeſt as he ſhall have received from any Britiſh Conſul, together with his log-book and journal, under a penalty of five hundred pounds.

Bills of health were probably conſidered as ſufficiently eſtabliſhed already by his Majeſty's inſtructions to Embaſſadors or

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Conſuls, in Europe; and in regard to Turkiſh ports, no ſhip, by the Levant Company's orders, could be deſpatched without one. But the rejected clauſes, propoſed to be inſerted in the bill of health, namely, "*at what time the laſt peſtilential contagion, or ſuſ-*"*picion thereof, began; and what number of perſons were ſuppoſed to* "*have died of the plague,*" had better, perhaps, have been received.

In the mean while it would ſeem expedient, that bills of health, or patents, ſhould be admitted under two denominations; namely, clean, and touched, or ſlightly tainted.

The clean patent, in the ſenſe commonly received, implies a declaration of the Conſul, under the public ſeal, that the place of his reſidence is then entirely free from the plague, and all ſuſpicions of plague, and has been ſo for ſuch or ſuch a time, but at leaſt for forty days preceding the date of the patent. The term of forty days having been adopted by common conſent in the ports of the Mediterranean, may on that account continue, as hitherto, to entitle the patent to the appellation of clean, but conſidering the difficulty, as ſhown before, of aſcertaining preciſely the time when the plague ceaſes, it ſeems reaſonable in England, where there are no regular Lazarettos, that all patents bearing forty days only, as well as ſuch declaring the place to have been free for any ſpace of time leſs than three months, ſhould be deemed touched, and the quarantine of the goods regulated according to circumſtances.

By circumſtances are here underſtood, the beginning and progreſs of the plague at the place, in the ſeaſon immediately preceding the date of the patent; a conciſe account of which ought to be tranſmitted by the Conſul, by the firſt ſhips deſpatched, as well as over land, by way of Vienna. In this manner the council of health would be in poſſeſſion of information on which to form an equitable deciſion; inſtead of relying merely on the patent, or on the very precarious intelligence collected from intercepted

tercepted letters, or from ſuch as the merchants are, on ſome occaſions, called upon to produce. The intelligence procured in this indirect manner is very little to be depended on; for it is a conſtant and prudential maxim of the merchants, to avoid the ſubject altogether in their correſpondence, or at leaſt to be very ſparing on it; from a juſt apprehenſion, founded in experience, that an unguarded paragraph about the plague, miſunderſtood in England, is capable of raiſing very needleſs alarm, and embarraſſing their ſhips. CHAP. VI.

Beſides the immediate advantage of enabling the council to form a deciſion, the tranſmiſſion of intelligence directly from abroad, would in time furniſh materials for an authentic hiſtory of the progreſs of contagion in the different *ſcales* of the Levant; from which, uſeful hints might be extracted for the future regulation of quarantines. Had a regiſter of this kind been kept from the time quarantines were inſtituted in England, no caſe hardly could now ariſe wherein the council would not have it in their power to derive ſome aid from precedent, in their deliberations.

The advantage of being acquainted with the uſual courſe of the plague, the ſeaſons of its beginning and its ending in different places, and of having an authentic ſtate of the progreſs of the contagion, in the ſeaſon preceding the date of the patent, will appear clearer from examples.

The plagues at Aleppo of 1742, and 1760, continued three ſucceſſive years. This probably was not the uſual courſe: but whether it was or was not, and in what manner it may have varied, in a certain ſeries of years, would have been matter of no doubt, had there been a regiſter, in the council of health, to recur to.

Had

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Had a ſhip in July, 1760, arrived from Scanderoon, with a patent from Aleppo, dated the 15th of May, the patent would have declared the city to have been free from the plague for fourteen years. If ſhips ever were admitted to immediate prattique, this ſhip was ſurely entitled to it. But, on the ſuppoſition made above, of information tranſmitted by the Conſul, the council at the ſame time, with the bill of health, would have received accounts of the plague being at Tripoly, and other maritime towns to the ſouthward, and of its having reached Damaſcus.

How ſhould this intelligence have affected the ſhip and cargo; ought ſhe immediately to have been put under a rigorous quarantine? A previous acquaintance with local circumſtances would moſt probably have determined it not to be neceſſary. The place ſhe came from, and, what is more, the places from which her cargo was collected, were free from ſuſpicion. The cargo and paſſengers therefore need not have been ſubjected to a much longer quarantine than uſual.

Suppoſing a veſſel deſpatched at the ſame time with the former, but, making a longer paſſage, had happened not to arrive till after advice was received of the plague having broke out at Aleppo, a few days after the date of her patent; would not that make ſome difference? No reaſon appears why it ſhould; both ſhips, the length of the voyage excepted, being in the ſame predicament, her patent, like that of the former, ſhould have been conſidered as touched.

The patent of a ſhip deſpatched from Aleppo in the month of October, of the ſame year, would have ſet forth the plague's having ceaſed forty or fifty days: but on the general principle beforementioned, the patent, though clean, ſhould be deemed touched, on account of the probability of merchandiſe being purchaſed and ſhipped, after the plague had ſpread in the town, and in the ſilk villages.

In

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In 1761, the patent of a ſhip deſpatched the beginning of March, declaring the city free for five months, would have been adjudged perfectly clean. But the ſilk and other goods being the produce of a peſtilential year, ſhould have been ſubjected to the ſame quarantine as if the ſhip had brought a touched patent.

Of the goods in the caravan prevented from proceeding in the month of March of that year [1], a conſiderable part was in the circumſtances juſt mentioned; but the daily addition of new bales, which, as it turned out afterwards, had been packed up in the courſe of ten days after the plague had broke out in the town, vitiated the whole, and the Conſul found himſelf reſtricted from granting a clean patent. Had there even been no addition of new bales, he would not have thought himſelf at liberty, after the plague was declared on the 30th of March, to grant a patent for the very ſame goods which would have obtained one, without ſcruple, in the beginning of that month. Indeed, he was left no option; it was impoſſible for him to declare the city free from the plague, and he had no means of modifying the declaration of its exiſtence, by an explanation in the patent: no diſcretionary power, in this reſpect, being entruſted to him by the laws. So much for clean patents.

The ſecond kind, the touched, or ſlightly tainted, ſhould expreſs the ſtate of the circumjacent country and villages, which may have ſuffered, or be ſuffering, from the plague, though the place of the Conſul's reſidence itſelf ſhould remain ſound. They ſhould alſo mention the arrival of infected veſſels in the port [2]; and

[1] Hiſtorical Journal.

[2] The Levant Company's order, prohibiting ſhips leaving Turkey without a bill of health, ſeems to circumſcribe the declaration of the patent to the place of the Conſul's reſidence; "which bill of health ſhall expreſs the exact ſtate of the health of "the place, from the beſt information which can be had." By their fifth order, a ſhip is permitted to come away after the plague has broke out, provided her goods were

and ſtate ſuch ſuſpicious reports, reſpecting the city, as the Conſul may ſometimes not have it in his power to aſcertain effectually, and which, though he cannot aſſert them to be groundleſs, ſtill leſs can he declare them to be well founded. Were clean patents to be refuſed in this ſtate of uncertainty, the Engliſh magiſtrate would probably incur the cenſure of being too rigorous,

The admiſſion of touched patents would extricate the Conſul from this dilemma, the merchants would have leſs cauſe for complaint, and, what is of ſtill more conſequence, one great inducement to the concealing peſtilential accidents being removed, authentic intelligence would more eaſily be procured, and the credit of patents be better eſtabliſhed. At the ſame time, not to leave a latitude liable to abuſe, the circumſtances in which touched patents may be granted might be defined, in general inſtructions to the Conſuls, ſuited to their different ſtations.

The ſpirit animating ſuch inſtructions ſhould always preſerve a due regard to the accommodations of trade, at the ſame time that it firmly conſults the public ſafety. The articles ſhould be expreſſed in ſuch plain terms, as to leave as little room as poſſible for difference of interpretation. The Conſul ſhould have his rule to refer to, and the merchant ſhould ſee clearly how far he may reaſonably requeſt. The prevention of inteſtine diſſentions, in a foreign ſettlement, is preſerving it from an evil, leſs only than the plague.

The detail of all theſe regulations muſt be left to the diſcretion of the council of health. It will be ſufficient here to propoſe a few practical examples.

were taken on board before its appearance, and that ſhe brings a certificate of her particular caſe from the Conſul. The patent here would be foul, the modification of it is contained in a ſeparate certificate; which in effect amounts to a touched patent. But no goods can be laden upon any certificate, after a ſingle accident of the plague has happened in the place.

A patent

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A patent granted at Aleppo in the firſt fortnight of May, 1760, would have been perfectly clean; the only objection to it muſt have ariſen from the ſtate of Damaſcus, which common uſage would have rejected as inſufficient. In the end of May, a few peſtilential accidents intervening in the town, a clean patent could no longer have been iſſued. In ſuch a caſe, might not a touched patent have been granted, and a ſhip, on departure, though part of her cargo was ſtill on the road to Scanderoon, have been ſafely permitted to load, and to proſecute her voyage?

In the month of October, of the ſame year, clean patents were iſſued; which, however, I have already given reaſons for thinking ought to have been treated as touched. But ſuppoſing a veſſel, after obtaining her patent, had procraſtinated her departure till the latter part of the year; and, in the courſe of November and December, two or three accidents had intervened to interrupt the Conſul's reckoning; would it have been leſs ſafe to have permitted the veſſel to proceed immediately with a touched patent, than to have let her remain forty days longer, in expectation of a clean one? In that interval new purchaſes would, in all probability, have been made, and the new goods joined with the others.

In the caſe juſt ſuppoſed, if the veſſel had received no new merchandiſe from Aleppo, after the accidents in November or December were known, ſhe might, agreeably to the company's orders, have departed with her firſt patent, accompanied with the Conſul's certificate, which would of courſe mention the reappearance of the plague; but ſuppoſing goods deſpatched from Aleppo, by the caravan, to be on the road to Scanderoon, at the time of the reappearance of the plague in that city, the goods not being actually laden before the accidents were known, the ſhip could not take them on board, without forfeiting her clean patent. She muſt therefore depart with what ſhe may have already got on board, leaving the reſt of her intended cargo behind, or muſt

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wait till the expiration of forty days, in hopes of being permitted to load with a clean bill of health; for the Levant Company's orders contain nothing about airing the goods at Scanderoon, in the ſame manner as at Smyrna and Alexandria. In this caſe it deſerves conſideration, whether there would be more danger, ſuppoſing Antioch and Scanderoon free from ſuſpicion, in permitting her to take the lag bales on board, after being expoſed ſome days to the air at Scanderoon, and deſpatching her with a touched patent, than in detaining her forty days in port, in uncertain expectation of obtaining a clean one. Amongſt other reaſons for this, it may be urged that while peſtilential accidents are few, there is a great chance of their remaining concealed: the ſhip may depart with a clean patent, but will have prolonged her intercourſe with a place, only declared free, becauſe a few accidents, which would vitiate the patent, happened to elude the vigilance of the magiſtrate.

In 1761, the plague made conſiderably more progreſs at Aleppo, and though it ſometimes decreaſed to a great degree, it did not entirely ceaſe, in the winter. In this reduced ſtate, as clean patents could not be granted for England; ſo touched patents ought, in like manner, to be precluded. The ſources or fomites of infection were ſpread more widely than in the former year; the adjacent territory, with ſeveral of the ſilk villages, had been infected; and the unuſual continuance of the diſtemper in the winter, left room to fear, that the peſtilential conſtitution of the air was not entirely paſſed.

The plague, in 1762, raged much more violently than ever, but ceaſed in the autumn. Clean patents were iſſued towards the end of October; but had not the reckoning for bills of health been interrupted about the middle of September, by ſome peſtilential accidents, they might have been legally iſſued the beginning of that month [3].

[3] Subjoined is a copy of my anſwer to a billet from the Conſul, on which he founded

Every reaſon, in 1760, for deeming clean patents, dated only forty days after the ceſſation of the plague, as touched, held more cogently in 1762, becauſe the plague had ſpread more widely than ever, and the goods to be exported at that time muſt, at leaſt a large part of them, have been the product of three plague years. CHAP. VI.

It may at the ſame time be obſerved, that the Conſul could not, conſiſtently with uſage, have declined iſſuing clean patents; for, if the reports of the plague, circulating in the place, were all indiſcriminately to be conſidered as impediments to patents, the Conſul of Aleppo would not be exempt from embarraſſment, even in times of perfect tranquillity, much leſs in the ſpring ſeaſon

founded the bills of health. It is certainly a difficult matter to pronounce abſolutely, that a place lately viſited is now free from the plague. The Conſul's billet ran thus:

Dear Sir,

AS I am to give a bill of health to-morrow morning for the *Reward*, I ſhould be glad to know from you, whether any difficulties have occurred ſince I laſt ſpoke to you on this ſubject.

Friday Evening,
October 29, 1762.

I am, &c.

Aleppo, Oct. 29, 1762.

To William Kinloch, Eſq.

SIR,

SINCE the peſtilential accidents which happened after the middle of September, and occaſioned your making an alteration in your reckoning of the time for granting bills of health, I have myſelf, though engaged in very extenſive practice, and viſiting, without reſerve, all ranks of people, met with no other inſtances of that kind.

I think proper at the ſame time to acquaint you, that in this interval reports of perſons being infected, and dying of the plague, have not been wanting in the city; of theſe reports ſome were ſo vague and uncertain, that I myſelf ſaw no reaſon for giving credit to them; others, into which I had an opportunity of enquiring, proved to be without foundation; and ſome few concerned patients under my own care, where I could not well be deceived. This, Sir, is the truth, ſo far as I know, regarding the ſtate of the city, in reſpect to the plague, and which in compliance with your requeſt I now communicate.

I am, &c.

ſucceeding a plague year; indeed, in ſome places, clean patents could hardly ever be granted at all. The advices propoſed to be tranſmitted by the Conſul, at the ſame time with the bill of health, by ſtating collateral circumſtances more at large, would enable the council of health to judge more diſtinctly on the whole, and to regulate the ſhips quarantine upon more ſolid ground than the ſimple patent, in its preſent form.

It may very reaſonably be ſtated, as an objection to what has been ſaid on the head of advices to be tranſmitted to the council of health, by the Conſul, 'that there ſeems to be a palpable in-'conſiſtency in granting a clean patent, which ſtands contra-'dicted by his private advices, and that a ſhip, departing in 'confidence of being received agreeably to the tenor of her pa-'tent, would find herſelf on the footing of a ſuſpected ſhip, 'upon her arrival in England.'

The objection is in ſome meaſure juſt; but cannot be obviated, as long as patents of one denomination only are admitted. Thoſe termed clean, have been ſhown to be ſometimes in reality touched, and the council of health, without implicitly relying on a title, will do wiſely, under certain circumſtances, to deem them ſuch, in the regulating quarantines; at leaſt till ſuch time as the legiſlature ſhall ſee fit to make alteration in the laws now exiſtent. At Marſeilles, the firſt clean patents iſſued after the ceſſation of the plague, in a ſcale of the Levant, are deemed foul, if the ſhip did not ſail within twenty days after ſuch patents began to be iſſued[4].

It may have been remarked all along, that much reliance is placed on the advices ſuppoſed to be tranſmitted by the Conſul;

[4] Les premieres patentes nettes qui ſont delivérées aprés la ceſſation de la peſte dans une Echelle, ſont regardées comme brutes ſi le Batiment n'eſt parti Vingt jours aprés qu'on a commenc, d'expedier ces patentes. Memoire ſur le Bureau de la Santé, p. 40.

but

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but it had before been mentioned, as a capital defect, that no provision was made for supporting or assisting the Consuls, in collecting the intelligence expected from them. As a remedy for this defect it will deserve consideration, whether it might not be expedient to have a regular surgeon, with a moderate salary, at each of the three principal settlements, Constantinople, Smyrna, and Aleppo. They should be appointed by the Company, and not be removeable unless upon the representation of the Consul and Factory, stating their reasons for such removal; nor at liberty to quit the settlement, without giving six months previous notice to the Company.

The instructions to these surgeons must be adapted to their respective situations; but principal articles in all should be the following. That the surgeon should exert his utmost vigilance in assisting the Consul to procure the earliest intelligence respecting the plague, either in the place of his residence, or in its environs. That he should make it his business, as far as circumstances will permit, to enquire into such rumours as he may happen to hear; and, where pointed instances are mentioned, he himself should endeavour to visit the suspected, inform himself of their cases, and, if there be eruptions, inspect them himself. That, in like manner, any time before the plague be openly declared, he should be obliged, at the requisition of the Consul, to visit any suspected patient to whom the Consul obtains him access, and report accordingly. That also, in the decline, or towards the termination of the plague, he should endeavour to inspect such suspicious cases, as might, by interrupting the Consul's reckoning of quarantine, unnecessarily, perhaps, impede the issuing of bills of health. That the case, together with his opinion, be delivered in writing to the Consul, and the reasons for that opinion be clearly and shortly stated. That he should not, under any pretence whatever, in the beginning or conclusion of the plague, conceal any accidents falling under his notice, which might affect the patents, nor defer communicating them

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them to the Conſul. And finally, That negligence in the performance of the above articles, or voluntary violation of them, ſhould ſubject him not merely to diſmiſſion, but to ſuch other penalties as ſhall ſeem fit to be inſerted in the covenant between the Levant Company and him, on his acceptance of the appointment.

Beſides theſe indiſpenſable duties, he ſhould be ſtrictly enjoined to embrace all opportunities of informing himſelf of every thing relative to the plague; its ordinary courſe in the country; the ſucceſs of different methods of treating it, as well by the natives as by others; the manner in which it was introduced, or ſuppoſed to be introduced; the concomitant ſtate of the weather, winds, &c. the proportion of the infected that recover; the amount of the mortality; and all other circumſtances conducive to the improvement of the medical and political hiſtory of the diſeaſe. The reſult of his experience and obſervation, to be drawn up at proper leiſure, in form of a memoir, to be delivered in to the council of health, and preſerved in their records.

The ſalaries affixed to theſe ſurgeoncies ſhould be moderate, in order to prevent their ever becoming objects but to ſuch as mean to exert themſelves, and who will be under a kind of neceſſity of exerciſing their profeſſion among the natives: a material circumſtance for their acquiring a knowledge of the ordinary epidemics of the country, and for preventing the being impoſed upon by fallacious reports of the plague. But as the epidemic diſtempers, as well as the plague, often begin, and in general ſpread moſt, among the lower claſſes of people, unequal to the expence of an European doctor's attendance, it might be adviſeable, as the means of inducing him to extend his practice among the poor, to ſend annually from England, ſuch medicines as the doctor himſelf ſhall chuſe, to a certain amount; it ſeeming but reaſonable that the ſurgeon, who is willing to give his attend-

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ance *gratis*, ſhould not be at the expence of the medicines he diſpenſes. CHAP. VI.

It may be thought an office, ſuch as now deſcribed, attended with ſo much danger, and ſo little emolument, is likely to find few perſons, properly educated, who would be diſpoſed to accept it. But I make no doubt there would always be found young men inclined to prefer ſuch an appointment, for ſome years, to the ſea or army line; not to mention the proſpect of contingent advantages of practice among the Europeans, and the natives of better rank. As a further encouragement, there might be an eſtabliſhment at home of one or more ſurgeons of quarantine, to which the gentlemen who had ſerved in Turkey ſhould be excluſively, or preferably entitled, in ſucceſſion; not ſtrictly according to ſeniority, but according to the opportunities they may have had of practice, and the diligence demonſtrated in the improvement of them; which will appear from the practical memoirs on the plague, to be delivered in by each, to the council of health.

The expence of ſuch an eſtabliſhment will appear of trifling moment to the public, if compared with the advantage of having a qualified perſon always ready, in caſe of alarm in England, to viſit perſons ſuſpected; and whoſe opinion would be entitled to more weight than that of phyſicians, though of indiſputed eminence, who have never had an opportunity of ſeeing the diſtemper in queſtion. It may be doubted, perhaps juſtly, whether there be now living in England five native Britons who have ever practiſed in the plague.

Should it be thought the propoſal of a new eſtabliſhment tends to create a new and unneceſſary expence abroad, becauſe what is propoſed to be done by the ſurgeons to be appointed, might be done by thoſe uſually eſtabliſhed at the different ſettlements, it ought to be known, that none are conſtantly eſtabliſhed there,

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and more particularly of late years. Thoſe formerly reſident, at leaſt at Aleppo, depended chiefly on practice, among the Europeans, and the natives; which, in reſpect of the latter, required a reſidence of ſome years in the country, and an acquaintance with its languages. From the narrative of the plague of 1760, at Aleppo, no general inference ſhould be drawn on this point; the perſon who acted then, having acted purely as a volunteer. I would have others bound officially to do part only of what I might have declined doing; for I do not think it matter of reproach to any one, the not poſſeſſing that degree of curioſity to ſee and practice in a diſeaſe new to him, which led me to expoſe myſelf, far beyond what was neceſſary for the information of a magiſtrate of health; and to which, I think, no one ought to be impelled but by his own inclinations.

CHAP. VII.

Regulations expedient in Turkey—Upon alarm of the plague, goods intended for Europe ſhould be ſeparated, and ſhut up—Cleaning and packing of goods in time of the plague, prohibited—The ſtate of the ſhip and crew to be aſcertained before lading—Precautions regarding goats wool, &c.—Infected merchandiſe purified before lading—Many obſtacles to ſtrict regulations in Turkey—The chief reliance ſhould be placed on proper precautions in receiving the goods in Britain.

HAVING conſidered two material points, namely the admitting ſhips with touched patents as well as with clean, and the mode of conferring more credit on patents, by ſecuring better intelligence to the magiſtrate of health in Turkey; I ſhall proceed to propoſe ſome other regulations which, at leaſt at Aleppo, are not practiſed at preſent.

1ſt. Upon

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1ſt. Upon a rumour of the plague's approach, as at Aleppo early in the ſpring of 1760, it ſeems expedient that the merchandiſe, already embaled, ſhould immediately be lodged in a ſeparate warehouſe, either in Aleppo, or at Scanderoon (the door of which ſhould be ſealed by the Conſul or Factor Marine) to remain ready to be ſhipped when an opportunity offers. Goods in this predicament might be reckoned clean, though exported after the plague had broke out at Aleppo; whereas if they remained ſcattered in different warehouſes, into which other goods are brought daily, and which are frequented by the natives of different ranks, they might juſtly be reckoned doubtful.

2d. As ſoon as the Conſul ſhall receive intelligence of the plague having reached the neighbourhood, or of its having been diſcovered in the town where he reſides, he ought to acquaint the merchants, and recommend the putting apart all merchandiſe intended for England, whether embaled, or ready to be embaled, to be kept ſhut up till the autumn. He ought alſo to enjoin the abſtaining from cleaning ſilk, goats wool, drugs, &c. becauſe thoſe operations neceſſarily bring into the warehouſe a number of work people, with whom communication ſhould be carefully avoided, both in the early and latter ſtage of the plague.

3d. A prohibition of trade, or of receiving, cleaning and packing goods, in ſuſpected times, that is, between the breaking out of the plague, and the Franks ſhutting up; and for a certain time after their coming out from confinement, appears to be expedient. But the propriety of keeping goods, not equally ſuſpected, ſeparate from each other, inſtead of mixing them promiſcuouſly, and comprehending the whole cargo in a clean patent, granted, perhaps, forty days after the plague has ceaſed, is too obvious to be enlarged on.

4th. The goods embaled before the breaking out of the plague, (1) if at Scanderoon, might be embarked after expoſure for ſome

BOOK IV.

days to the open air. If they are ſent from Aleppo, though on the journey they will be expoſed ſeveral days on the backs of the camels, yet, being then wrapt up in *labets*, which prevents the free acceſs of the air, it will be proper, on their arrival at Scanderoon, after ſtripping off the labets, to give them an airing. With theſe precautions, I conceive, they might ſafely be put on board.

5th. Previouſly to the ſhipping the goods, the Factor Marine ſhould diligently enquire into the condition of the ſhip, and the crew. Whether the crew are in perfect health: or whether they have of late been ſickly, and, if ſo, of what diſtemper. Should it appear that any contagious, or intermittent fever, or flux, had prevailed ſome time before, but had now ceaſed, the ſhip ſhould every where within be thoroughly cleanſed, and two or three times ſmoked, before taking in the goods. The clothes, hammocks, and bedding of the ſailors ſhould be ſmoked, waſhed and aired; but particularly apparel that may have belonged to any of the deceaſed, whoſe bedding ought to be deſtroyed. If ſickneſs be ſtill ſubſiſting among the crew, it is material the nature of the diſtemper ſhould be known; and if it appears to be of a doubtful kind, or attended with ſudden mortality, or with eruptions, the goods on no account ſhould be ſhipped. The Conſul of Aleppo ſhould be adviſed; and, if thought requiſite, the ſurgeon ſhould be deſpatched to Scanderoon, to enquire more ſtrictly into the actual ſtate of the ſick.

It is materially the intereſt of the merchants, that the ſtate of the crew's health, at the time of the ſhip's departure, ſhould be exactly known. Not only a mortality on the paſſage, but even the death of two or three men, though from other diſtempers than the plague, would infallibly cauſe embarraſſment; and, in foreign Lazarettos, it is the uſual practice, without regard to clean

clean patents, to deem thoſe ſhips infected which have loſt men on the paſſage[1]. CHAP. VII.

It is material alſo, that the Conſul ſhould have an exact ſtate of the ſhip laid before him, when he grants a patent; and, if the uſual form of patents be retained, extraordinary circumſtances relating to the ſhip or cargo, ſhould make an article in the Conſul's advices to the council of health.

Should it appear that any of the crew had died of the plague, or happened to be infected, during the time of taking in the cargo, an embargo ſhould be laid on the ſhip; the infected perſon ſhould, together with his cheſt and bedding, be immediately removed; the goods, already laden, ſhould be relanded for purification; and the ſhip ought to be repeatedly fumigated during her quarantine, which ſhould not be leſs than two months.

6th. The ſilk, goats wool, &c. to be cleaned and packed up, in the decline, or in the latter end of the ſeaſon, require more circumſpect treatment than in the beginning. It might be a regulation, that no work of that kind ſhould be permitted, till twenty days, according to the Conſul's computation, from the laſt peſtilential accident, were elapſed: and before the ſilk or wool be embaled, they ſhould be expoſed for ſeveral days to the air, and in that time frequently moved and turned. The reaſon for waiting twenty days before beginning to prepare the goods for exportation, is not founded on a notion that, if the goods were tainted, they could in ſo ſhort a time be rendered pure, but to obviate the riſk of infection being communicated by the perſons employed to work upon them; who, though found themſelves, may very probably ſleep in houſes that had lately been infected, and are hourly in the way of having intercourſe with convaleſcents.

[1] Traité de la Peſte, p. ii. p. 178.

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The danger to be apprehended from theſe workmen, I cannot help regarding as conſiderable, becauſe, in the beginning of the ſeaſon, I have known inſtances of their having the plague in their families, at the very time they were daily employed in the Frank warehouſes; and even of ſome of them going to work before their ulcers were healed. It was on this account that I propoſed an abſolute prohibition of employing them in the beginning of the peſtilential ſeaſon. In the autumn, when they muſt be admitted, if ſhips are to be deſpatched at all, they might be obliged to perform a quarantine of ten days, before they begin to work. That is, they ought to be kept in the khane, or ſome other ſecure place, without permiſſion to communicate, during that time, with their families; having their victuals prepared, and their clothes waſhed, in the khane, or wherever they are confined. The perſons here meant are the *Stracciadores*, or cleaners of the ſilk, the embalers, and the porters; all of whom ought to be kept under the ſame reſtrictions, during the time they are employed on the goods; or, at leaſt, till the expiration of the quarantine of forty days for patents.

I am fully aware that ſeveral difficulties may ariſe, in the execution of this regulation, and if they are not ſurmountable, I can ſee no alternative but a ſtrict prohibition againſt cleaning or embaling goods, before the expiration of forty days from the laſt peſtilential accident. For it appears inconſiſtent with every principle of precaution, that goods which have been purchaſed, cleaned, and embaled in the latter part of the ſeaſon, during the quarantine of forty days after the ſuppoſed ceſſation of the plague; while many convaleſcents frequent the bagnios and the ſtreets, and, of thoſe who were employed on the goods, ſome may have been in a ſtate of convaleſcence, and the wives and children of others may have been infected; I ſay, it appears to me utterly inconſiſtent, that ſuch goods, without any previous precautions whatever, ſhould be permitted to be ſhipped, and the ſhip diſmiſſed with a clean patent.

Should

Should one or more of the perſons employed on the goods happen to fall ſick of the plague, the quarantine muſt recommence, whatever may be the number of days elapſed: and the goods, being deemed infectious, ought not to be exported without particular precautions before lading.

7th. The goods thus reckoned infectious, of which, on a fair repreſentation of circumſtances, the Conſul muſt judge ultimately, inſtead of being exported in the firſt ſhip that receives a clean or touched patent, ought not to be permitted to be ſhipped at all, without undergoing a previous purification. This would require a diſtinct area, ſeparate from clean goods; and workmen who muſt be debarred all intercourſe with thoſe employed in other places. The unembaled goods ſhould firſt be properly aired, and ſuch as have been already embaled, ſhould be unpacked, and aired in like manner with the others, for twenty or thirty days.

This, according to Sir James Porter, was actually done formerly. "Orders with regard to merchandiſe were as effectually "enforced, and as punctually executed as at a Venetian or "French quarantine[2]." But whatever it might be in former times, the practice was not known at Aleppo in 1760, and neither there, nor at Conſtantinople, nor at Smyrna, did I perceive the traces of any areas or encloſures, deſtined for the purpoſes of ſimilar regulations[3]. Of the two places laſt named, however, I ſpeak with leſs confidence; and could wiſh that what has been ſaid on the ſubject of particular regulations, may be underſtood in a limited ſenſe, reſpecting chiefly Aleppo and Syria.

From the ſpring of 1761, to the latter part of the year following, no ſhips were deſpatched from Aleppo, the uninterupted continuance of the plague excluding all clean patents. But after

[2] Obſervations on the Turks, p. 443.

[3] The Company's orders mention only warehouſes for airing the goods.

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the month of October, 1762, the merchandiſe accumulated in that interval, might have been ſhipped indiſcriminately, without any previous purgation, and the ſhips were entitled to clean patents. To juſtify ſuch a relaxation in precautions abroad, the precautions practiſed in England on the reception of merchandiſe ſo deſpatched, ought to be much more ſtrict than I apprehend they will, upon enquiry, prove to be[4].

It may, perhaps, be poſſible to frame regulations which might, in ſome meaſure, correct the abuſes, almoſt unavoidable, on the preſent ſyſtem, in the deſpatch of ſhips from Turkey to England, in ſuſpicious times, but it may be very much doubted, whether the beſt concerted regulations could be effectually carried into execution, without previouſly reſtoring the excluſive privilege of the Levant Company[5], and the ancient practice of annual ſhips[6]. The neceſſity of new regulations, in reſpect to quarantine, was foreſeen at the time of laying the charter open, and experience has ſhown the conjecture to have been right. The ſalutary preſervative regulations of the old Turkey merchants againſt the plague, could no longer be enforced, and, in a man-

[4] Doctor Brownrigg, in a ſmall Tract on Peſtilential Contagion, publiſhed in 1771, which I had not an opportunity of ſeeing till lately, and which contains ſome ſenſible remarks on the ſubject, has obſerved, "that after the plague had raged two "years at Aleppo, in 1761 and 1762, the Britiſh Conſul, ſo ſoon as it had there "ceaſed for forty days, thought himſelf authorized to give the maſters of ſhips, "who had long waited to take in goods from that place, ſuch bills of health as are "uſually there called clean bills; on producing of which at the cuſtom-houſes of "this kingdom, the merchandiſe brought from that place would be permitted to be "landed without performance of quarantine, or other precautions taken; although "ſome of the ſilk, cotton, camels hair, or other goods, of which the cargoes brought "from Aleppo uſually conſiſt, might poſſibly have been long depoſited there in in-"fected houſes, and if infected with that contagion, might have communicated it "to the crew, or might retain it for a much longer time than was required for con-"veying thoſe goods into this kingdom." Conſiderations on the Means of preventing the Communication of Peſtilential Contagion, p. 10. Lond. Davis, 1771.

[5] Porter's Obſervations, p. 427.

[6] Ibid. p. 363.

ner,

ner, became obſolete. The quarantine laws at home were improved, but the orders reſpecting Turkey ſhips, intended only as a ſuccedaneous expedient, preparatory to the future eſtabliſhment of Lazarettos, did not make ſufficient and permanent regulations, to compenſate the relaxation of reſtraints which has taken place in Turkey.

According to all appearances at preſent, neither the reſtitution of the Levant Company's charter, nor that of the practice of annual general ſhips are likely to be adopted; and numberleſs difficulties would be met with in finding places properly circumſtanced for purifying goods before ſhipping. The precautions therefore that can be taken in Turkey, ought not to be too much relied on, and are far from ſuperſeding the neceſſity of vigilance at home.

In every point of view it is of material conſequence, that the real ſtate of the place, from whence the ſhip comes, ſhould be exactly known. According to the preſent laws, his Majeſty, in council, determines the length of the ſhip's quarantine; the goods that are to be unpacked, and the time to be employed in their purification, which varies, according to circumſtances; and ſometimes the opening of goods ſuſceptible of infection, is diſpenſed with altogether.

Nothing can be more evident than that deciſions of this nature ſhould be founded on a degree of information, which, as matters ſtand at preſent, it is impoſſible, with reſpect to Turkey, the council ſhould at all times be poſſeſſed of. The conſequence of which is, that commerce is ſometimes injured by quarantines of unneceſſary length, without any additional advantage to the public ſafety, and, at other times, the public ſafety is endangered by deciſions grounded on imperfect information. The prolonging the quarantine of a ſhip to forty days, and the diſpenſing with the cargo being opened and aired, does moſt certainly afford little or no ſecurity to the ſafety of the public, and, it is no leſs certain, injures the merchant without neceſſity.

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Upon the whole, as I am obliged to differ widely in opinion from Sir James Porter, in regard to the perfect reliance, which he thinks, may be placed on the regulations eſtabliſhed in the Levant, ſo I cannot help being extremely doubtful whether, in the preſent ſtate of the Turkey trade, any regulations, which may in future be eſtabliſhed there, would operate ſo effectually as to ſuperſede the neceſſity of precautions in England, in the reception of ſhips coming directly from the Levant. Thoſe which have been juſt propoſed, or others of a ſimilar kind, but more correctly conſtructed, would certainly be of ſervice, as they would remedy ſome abuſes, and ſome defects: but I can foreſee ſo many difficulties, ariſing from local circumſtances, to the carrying them effectually into execution, that it appears to me highly becoming the wiſdom of the legiſlature, to provide for the public ſafety, in a manner leſs precarious. The barriers already raiſed will admit of ſome amendment, but ſhould be conſidered merely as temporary defences, till more effectual can be erected: till the condition of the times ſhall permit the parliament to reſume, at leiſure, the project of eſtabliſhing regular Lazarettos, which was ſtrongly in contemplation in the year 1752, and again in 1764. Theſe only can promiſe permanent ſecurity to a commercial nation, againſt bringing in the infection of the plague from foreign parts.

A

TREATISE

OF THE

PLAGUE.

BOOK V.

Of Lazarettos and Quarantines.

CHAP. I.

Objections to Lazarettos and Quarantines, aſſerting their being inadequate to the purpoſes intended, unneceſſary, and even prejudicial to the public health, diſcuſſed.

IN the cloſe of the preceding book, I have concurred in the opinion, that proper Lazarettos, and Quarantines regularly conducted, are the only means a commercial nation ought to truſt in, for preventing the infection of the plague being brought from other countries. In the preſent book I ſhall give the ſketch of a Lazaretto, and offer ſome remarks on the performance of Quarantine. CHAP. I.

Having already diſcuſſed ſeveral objections to Lazarettos and Quarantine, which repreſented them as wholly unneceſſary, becauſe the infection could not be tranſported in merchandiſe, nor communicated from one perſon to another; I ſhall now take

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notice of ſome of another kind, which, admitting what had been denied in the former objections, repreſent Lazarettos as being altogether inadequate to the purpoſes intended; dangerous to the public health, which they are meant to protect; and highly detrimental to commerce, which they clog with unneceſſary reſtraints, vexatious delays, and ruinous expences.

"What account (ſays an author who wrote againſt Dr. Mead "in 1721) can be given to merchants, for their goods ſerving "Quarantines on the frivolous reaſons of Ifs and Perhapſes, and "the whole trade and riches of a nation being troubled and in-"terrupted for childiſh and ridiculous ſuggeſtions[1]. As the "plague may be brought and propagated (in Dr. Mead's opinion) "by air, what defence can leper-houſes and peſt-houſes prove in "keeping the plague out of the country. We may as well build "a wall, to keep out larks, as barracks, to keep out plagues[2].

Dr. Pye, who treats the ſubject more fully, undertakes to ſhow that Quarantines are not ſufficient to ſecure us againſt any infection that may be ſuppoſed to be brought in goods, and that they are not the beſt means that can be uſed; but, on the other hand, are the moſt likely to occaſion what is propoſed to be prevented by them. This he attempts to prove, in eight or nine propoſitions, of which I ſhall give an abſtract; becauſe what he ſays contains the moſt material things urged on the ſubject, and he has been copied by ſeveral ſubſequent writers.

"If Lazarettos (ſays he) were made in England, for the re-"ception of perſons and goods coming from infected places, and "if it be ſuppoſed that by remaining in theſe for the ſpace of "forty days, they may be cleared of the infection they had "brought with them; nevertheleſs, conſidering the largeneſs of "our trade, there muſt be other ſhips continually arriving;

[1] Short Diſcourſe explained, 2d edit. p. 27.
[2] Diſtinct Notions of the Plague, p. 73.

"and

" and ſince perſons and goods in a Lazaretto muſt be as liable as
" otherwiſe to receive infection; it follows, that whenever they
" are diſmiſſed, though they have got rid of their own, yet
" they muſt, in all probability, have received, and bring with
" them, ſome part of the new-come infection. Whence it may
" appear, that if the infection can be received from perſons or
" goods, Quarantines are no ſecurity; and if it is not received
" that way, they are not only uſeleſs, but a very great grievance [3].

On this article it will be ſufficient to obſerve, that the whole proceeds on a total miſcomprehenſion of the practice of Quarantine, in a Lazaretto. The cargoes of different ſhips are kept ſeparate; the paſſengers from different ſhips, do not mingle together, or communicate; and it may be obſerved further, that few perſons, belonging to the ſhips, beſides paſſengers, enter the Lazaretto, the captain of the ſhip, with the crew, performing Quarantine on board of the veſſel.

" If the ſeeds of contagion can be brought by perſons and
" goods, then the making Lazarettos muſt be erecting and eſta-
" bliſhing ſo many ſtorehouſes or ſeminaries of contagion - - -
" which muſt be continually encreaſed by means of infected
" perſons, or of perſons and goods coming from infected places:
" and by being thus encreaſed, and thus nurſed up, it muſt be-
" come exceedingly intenſe. Making Lazarettos therefore is
" bringing ſo many infected places home to us, and every perſon
" coming out of a Lazaretto, or every parcel of goods brought
" from thence, may be ſaid to come from an infected place [4].

" Either the ſeeds of contagion muſt remain in the goods,
" and then Quarantines are to no purpoſe, or they muſt be ſe-
" parated from them, and conveyed away by the motion of the

[3] Pye's Diſcourſe of the Plague, p. 45.
[4] Ibid. p. 46.

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" air. If the latter be admitted, it muſt be allowed withal, that " by the motion of the air, they may be conveyed farther and " farther, ſo as to ſpread the infection not only all over the La- " zaretto, but likewiſe to the adjacent cottages and villages - - - " And as the Lazarettos will be continually ſupplied with the ſeeds " of contagion, (by perſons and goods from infected places) they " may be looked upon as funds and ſources of contagion, whence " infection muſt continually flow, and be derived all around them, " and to the adjacent parts[5]."

In anſwer to this, I ſhall refer to what was formerly ſaid on the ſpreading of infection, through the medium of the air[6]; obſerving further, that from the want of proper information, the Lazaretto is here repreſented as an hoſpital crowded with infected patients. But the truth is, that infection would very rarely exiſt in the Lazaretto; and where it did, would, by vigorouſly enforcing eſtabliſhed regulations, be prevented from ſpreading, and ſoon extinguiſhed. At Marſeilles, in 1720, the plague, which firſt attacked the porters employed in opening the bales, did not ſpread in the Lazaretto.

" If it be likely that in winter the contagion may not be " taken out of goods, but that goods may ſtill retain it, though " unactive, till the warmth of the ſpring ſhall give it new life " and force, then Quarantines in winter will be a very precarious " and uncertain means, if they are not altogether uſeleſs[7]."

This is in alluſion to a remark of Mead's that, " there are in- " ſtances of the diſtemper being ſtopt by the winter cold, and " yet the ſeeds of it not deſtroyed, but only kept unactive till " the warmth of the following ſpring has given them new life " and force. - - - Now, if goods brought from ſuch a place ſhould

[5] Pye's Diſcourſe, p. 47. See book iii. chap. 7.
[6] See book iii. chap. 3. and chap. 7.
[7] Pye's Diſcourſe, p. 44.

" contain

" contain any of the latent contagion, there will be danger of " their producing the ſame miſchief in the place, to which they " are brought, as they would have cauſed in that, from whence " they came [8]." Mead's apprehenſion is juſt, on the ſuppoſition of a concurrent diſpoſition in the air of the place where the goods are imported. But it does not follow becauſe cold checks the progreſs of contagion, that infected goods cannot be purified by expoſure to the air in cold weather. The effects of winter and ſpring, in checking or promoting contagion, may perhaps, in ſome degree, be referred to alteration produced in the human conſtitution, by which it is rendered more or leſs ſuſceptible of infection, as well as to the immediate influence of heat or cold, on the peſtiferous miaſmata. Should this however be doubted, artificial heat may, in the winter, be employed to aſſiſt in the purification of the merchandiſe.

" The enforcing Quarantines will certainly and inevitably en- " creaſe the running of goods, by which means we may be as " much expoſed to the plague, if it can be imported with goods, " as if Quarantines were not enjoined. Whereas, if inſtead of " performing Quarantine (in Lazarettos) all ſuſpected ſhips ſhould " only be obliged to open all their goods upon deck, as there " would then be no new inducement to the running of goods, " fewer would be brought on ſhore without having had a pre- " vious airing; and conſequently we ſhould be better ſecured " from foreign infection, than if the Quarantine ſcheme takes " place [9]."

In propoſing to air the goods upon the ſhip's deck, Doctor Pye was not aware, beſides the riſks and inconveniencies goods would be expoſed to in an Engliſh climate, that they would thus be ſubject to a more tedious Quarantine, than in the wider ſpace of a Lazaretto, where they are expoſed to the air nearly all at

[8] Mead on the Plague, 1ſt. edit. p. 28, 29.

[9] Pye's Diſcourſe, p. 44.

once.

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once. As to ſmuggling, there is undoubtedly much to be apprehended, and it is a principal object in the Quarantine Laws to prevent it. But that we ſhould be as much expoſed from the goods brought in clandeſtinely, as if Quarantines were not enjoined; or that we ſhould be better ſecured, by airing the goods upon deck than in a Lazaretto, both from infection and ſmuggling, are ſtrange poſitions. Suſceptible bale goods from Turkey are, I believe, never ſmuggled at all, and as to ſmall parcels of ſilk or cotton ſtuffs, &c. they would certainly have a better chance of being ſafely run, in the courſe of time requiſite for airing the cargo on board, were that method adopted, than in the few days before their being ſecured in the Lazaretto. Goods intended to be ſmuggled would hardly be aired openly on deck; to expoſe them to the guards of the cuſtom-houſe, or thoſe of Quarantine, would be to increaſe the difficulty of getting them on ſhore; and therefore the notion that fewer goods would be brought in clandeſtinely, without having had a previous airing, I apprehend to be erroneous.

"If infection can be brought by ſhipping, Quarantines will be "found of precarious and uncertain uſe, unleſs they be enjoined "at all times, and to all ſhipping, from what part ſoever of the "world they come; for it may very eaſily happen, that a ſhip "may come away from a place newly infected, and be arrived "here, before we have received the news of the place's being "infected; and it muſt take up ſtill more time before the go-"vernment can have iſſued, and the proper officers can have re-"ceived, the neceſſary directions as to thoſe affairs. Farther, "goods may be brought to us from infected places by the way of "other countries, in which caſe, it is moſt probable they will "not have been unpacked, ſo that the ſeeds of contagion will "be retained in them till they are opened[10]."

[10] Pye's Diſcourſe, p. 48.

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Doctor Pye has here, unintentionally, given a very good reaſon for eſtabliſhing a continual Quarantine, for ſhips from certain countries, where the plague often rages. The arrival of a ſhip, before the news of the place ſhe came from being infected, implies that the plague muſt have broke out there after her departure, otherwiſe it would appear on her bill of health. If ſhe came from a place very ſeldom ſuſpected, the ſuppoſed caſe might poſſibly happen; but no ſhip from the Levant ſhould ever be admitted to immediate prattique. Were regular Lazarettos eſtabliſhed, I conceive all ſuſceptible goods from the Levant would be landed there; and the ſhip and crew, after unlading, would perform a certain Quarantine; in which interval advices moſt probably would be received, to enable the council to regulate the Quarantine of the goods. But there is not the leaſt neceſſity for laying all ſhips under the ſame reſtraint with thoſe coming from the Levant. As to the probability of contagion being brought by the way of other countries; there are, perhaps, no European countries with which we have direct commerce, who are in the uſage of receiving ſuſceptible merchandiſe, without taking ſome previous precautions, unleſs ſuch merchandiſe has ſomewhere or other performed Quarantine: and this precludes the probability of the goods remaining all along unpacked [11]. But granting ſome poſſible danger to be apprehended from theſe unuſual channels, does it follow that all the other avenues, by which experience has ſhown the contagion may find acceſs, ſhould be left unguarded? and that unleſs Quarantines were enjoined at all times,

CHAP. I.

[11] I am perhaps miſtaken in conceiving that all ſuſceptible merchandiſe is unpacked every where on the Continent; the contrary is aſſerted in reſpect to Holland. "The cottons that come to us by way of Holland, though ſhipped in the "Levant, in time of the plague, are, while under Quarantine in Holland, never "opened and aired, as is done in all the Lazarettos in the Mediterranean, but for-"warded to England in their original packages, where they perform again the ſame "ſlovenly Quarantine; and are then ſent down to our manufacturing towns, "where they are firſt unpacked, and where, by this means, the plague may very "eaſily be introduced." Letter from the Smyrna merchants. Howard on Lazarettos, p. 31.

BOOK V. and to all "ſhipping whatever, they muſt be very uncertain and "inſufficient meaſures of ſecurity."

"And though ſuch an univerſal Quarantine ſhould be enjoined, "even ſtill we ſhould not be ſecure; for if ſhips coming from "infected places be permitted to come near the ſhore, it will be "impoſſible to prevent all kind of commerce and correſpondence "with them[12]."

The prevention of ſmuggling and other irregularities will require vigilance, but is not impoſſible, becauſe it is actually effected very often. A law is not deemed uſeleſs, becauſe a moral poſſibility may be alleged of its being violated. An interdiction of all improper communication (for correſpondence of every kind need not be prohibited) with ſhips liable to Quarantine, enforced under ſevere penalties, will certainly leave the ſea coaſt leſs expoſed than it would be without the reſtriction of any laws whatever.

After all theſe objections to Quarantines, it is at length aſſerted, "that we find in fact, they are not ſufficient for keeping off the "plague; for though at Marſeilles all ſhips coming from Turkey, "or other places ſuſpected of infection, have been obliged to "perform Quarantines, yet we ſee thereby they have not been "ſecured; the plague has found its way amongſt them notwith-"ſtanding - - - If it be ſaid, that poſſibly it might be for want "of due obſervance of them, I anſwer, it is ſo far from being "likely they ſhould be performed more ſtrictly here, that we "cannot hope to have them near ſo well obſerved; for as the "trade to London is vaſtly larger than to Marſeilles, hence it "will become more difficult to ſee the due obſervance of them; "and beſides, if in an arbitrary kingdom a ſtrict obſervance can-"not be exacted, it muſt not be expected in a free govern-"ment[13]."

[12] Pye's Diſcourſe, p. 49.

[13] Ibid. p. 47.

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CHAP. I.

The firſt part of the objection amounts to this, that becauſe Quarantines do not afford infallible ſecurity againſt the plague, they therefore are uſeleſs. That they are not infallible, muſt certainly be allowed; and in that defect they partake in common with almoſt all human precautions againſt the evils of life: but their utility is evinced by the experience of Marſeilles[14], not to mention that of ſundry Italian ſtates, which have long adopted them[15]. The laſt part of the objection is confeſſedly juſt; difficulties in the carrying ſtrict regulations into execution, may ariſe in England, which are more eaſily ſurmounted in France, and therefore it will require all the wiſdom of the legiſlature to frame laws, and ſecure the rigid execution of them, without encroaching too far on the liberties of the ſubject, in a free government. But, amongſt other difficulties, the great ſuperiority in the number of ſhips need not be enumerated; for, if I am not miſtaken, more ſhips from the Levant enter the port of Marſeilles in one year, than the port of London in the courſe of ten.

"But let it be ſuppoſed (ſays Doctor Pye) that Quarantines "could in ſome manner or other be enforced, ſo as to become "an effectual means of ſecurity; I am perſuaded it might ſtill "be made appear, it would not be for the intereſt of this nation "to enforce them. - - - Though the plague be an evil much to "be dreaded, yet if the meaſures neceſſary for the ſecuring us

[14] See Mead, p. 44.

I was aſſured at Marſeilles that ſince the year 1722, ſeveral inſtances have been known of perſons being infected in the Lazaretto; and whilſt I performed Quarantine there, was ſhown the encloſure deſtined for perſons infected, which my guard told me had been occupied a few years before. Strict regulations prevent the infection from ſpreading.

The regulations of the Lazaretto at Marſeilles have been much improved ſince the year 1720. Several abuſes were at that time expoſed to view, which were corrected in the regulations of 1731. See Traité de la Peſte, p. ii. p. 173, and Memoire ſur le Bureau de la Santé, Marſeille, 1753.

[15] See Muratori del Governo Politico della Peſte, lib. i. c. 1.

BOOK V.

" from it muſt occaſion more and greater evils, it may be moſt " adviſable to run the riſque of the plague, rather than ſubmit " to ſuch hard meaſures. Now as it cannot be doubted but the " enforcing Quarantines in a trading nation, muſt occaſion many " and great inconveniencies and evils; theſe ſhould be conſi- " dered as well as the good we may thereby hope to have ſe- " cured to us. The good we may expect from ſuch meaſures is " the keeping off the plague; and the evils to be feared are the " decay and ruin of trade. The plague may poſſibly deſtroy a " hundred thouſand lives; but the loſs of trade may ſtarve and " deſtroy ten times a hundred thouſand; for Quarantines will " load our foreign commerce with ſuch hardſhips, and embarraſs " it with ſuch inſuperable difficulties as will very much diſ- " courage trading, and very greatly diminiſh it. The conſe- " quences of the decreaſe of trade, muſt be the decreaſe of riches, " of manufactures, of the cuſtoms, of public and private credit; " hence bankruptcy, idleneſs, and poverty, all of which evils " muſt be in ſome degree or other immediate and certain; " whereas the evil to be avoided (the plague) is altogether un- " certain, has not happened theſe fifty-ſix years, and probably " may never happen again [16]."

I conceive it is totally unneceſſary to waſte much time in commenting on this laſt objection. The dreadful conſequences predicted are certainly ſuch as Quarantines, which affect but a ſmall branch of the Britiſh commerce, can never be productive of; and, I believe, a very ſmall proportion of thinking men could readily be perſuaded, that a plague which in England ſhould deſtroy a hundred thouſand lives, would not more generally interrupt commerce, and prove more effectually ruinous to the induſtrious claſſes of mankind, than all the inconveniencies, however exaggerated, that can be ſuppoſed to ariſe from the means employed to preſerve the country from its importation. Few perſons, in a matter of ſuch ſerious conſequence to mankind, would heſi-

[16] Pye's Diſcourſe, p. 50.

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tate in rejecting a propoſition raſhly hazarded "That the ne- CHAP. II.
"ceſſary immediate injury and loſs that muſt be occaſioned to a
"trading nation from the enforcing Quarantines, will be more
"than equal to the riſque it runs without them of having the
"plague, which muſt be allowed very uncertain, and what may
"never happen; or that the certain evil will much more than
"counterbalance the uncertain good[17]."

I forbear mentioning ſeveral other writers who oppoſed the inſtitution of Lazarettos and Quarantines, about the year 1721 and 1722, finding little or nothing, in the arguments urged by them, different from what has juſt now been produced from Doctor Pye.

CHAP. II.

General ſketch for a Lazaretto—Prattique Houſe—Mode of delivering proviſions for the ſhip's company.

HAVING obviated the principal objections[1] I have met with, to the expediency of Quarantines and Lazarettos in England, I ſhall proceed to make ſome remarks on the practice of them. Firſt, on the ſuppoſition of a regular Lazaretto being erected; and afterwards, on the mode at preſent actually adopted. The Lazaretto I conſider as infinitely preferable; the other, as ca-

[17] Pye's Diſcourſe, p. 53.

In reſpect to the ſuppoſed injury to commerce, I ſhall refer to Mr. Howard, (on Lazarettos, p. 26) who has given the unanimous opinion of the Britiſh merchants in the Levant, on this head, and, from their ſtatement, it would appear that a Lazaretto, in England, would be a great advantage to commerce.

[1] Objections to Lazarettos, as well as to other preſervative regulations, have been made by other nations as well as the Engliſh; and turn moſtly on the abuſe, neglect, or perverſion of regulations. Muratori, lib. 1. c. xi. p. 96.

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pable of ſome improvement in its regulations, but liable to dangerous abuſes.

The conſtruction, extent, and arrangement of the different parts of Lazarettos, muſt be accommodated to circumſtances of commerce, as well as to the various diſpoſition of the ground on which they are erected; but the general plan may be nearly the ſame in all[2].

The ſituation ſhould be inſulated, dry, healthy, and airy, with a ſource of water within itſelf, or ſo near other ſources as to be eaſily ſupplied from them. The encloſure ſhould be of ſufficient extent to admit the neceſſary ſubdiviſions, with proper ſpaces between each; for the whole area being encompaſſed with a high wall, ventilation muſt not be impeded, by crowding compartments within too cloſely together. The wall being not ſo much intended for the prevention of perſons making their eſcape, as of the clandeſtine conveyance of goods or ſmall parcels; a ſecond wall is ſometimes erected, at ſuch a diſtance from the firſt, that it is impoſſible to throw any parcel over both[3].

[2] The indefatigable pains taken by the late humane Mr. Howard, in the collection of plans and deſcriptions of foreign Lazarettos, which he liberally publiſhed laſt year, renders it ſuperfluous for me to give more than a general ſketch, referring to his book for a detail of minutiæ.—It is with great pleaſure I have it in my power to make this reference, as Mr. Howard's enquiries were conducted on a much more extenſive ſcale than I was capable of, when travelling in France and Italy, ſome years ago.

In the above ſketch, I keep the Lazaretto at Marſeilles, where I myſelf performed quarantine, chiefly in view, without pretending to exhibit a regular plan; and indeed make occaſional deviations. The Traité de la Peſte, and the Marſeilles Memoire ſur le Bureau de la Santé, furniſh many inſtructive hints for the conſtruction of Lazarettos, and Mr. Howard has perhaps left little more to be deſired on the ſubject.

[3] The walls of the Lazaretto at Marſeilles are twenty-four feet in height, and a ſpace of thirty-ſix feet is left between the inner and outer wall. Memoire ſur le Bureau de la Santé, &c. p. 7. See alſo Traité de la Peſte, p. 180.

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The Lazaretto ſhould have three gates, one towards the land, and two towards the water. Each of the water gates ſhould have its ſeparate quay, one for receiving the merchandiſe from the ſhip, the other for delivering them, after the having performed quarantine. The quays to be ſo contrived, that the lighters loading or unloading ſhould have no communication with each other. CHAP. II.

That part of the encloſure deſtined for the reception of goods, ſhould be divided into two diſtinct compartments, one for cargoes coming with clean, the other for thoſe with touched patents; and there ought to be a third, ſmaller than either of the other two, for infected goods. For though it may be adviſable in England, at leaſt till experience be acquired by practice, either to receive no ſhips with abſolutely foul patents, or to have a diſtinct Lazaretto for their reception; yet as the infection may happen to diſcover itſelf in ſhips provided with other patents, or in their cargoes in the Lazaretto, it will be better to make proviſion for ſuch accidents.

In each of the compartments above mentioned, commodious ſtone buildings ſhould be erected, for airing the goods; and ſo arranged, that the cargo of each ſhip may be kept ſeparate, without any poſſibility of illicit interchange of bales, or ſmall parcels[4]. The porters employed in purifying the reſpective cargoes, and the clerks or others ſuperintending them, ſhould be debarred all intercourſe; they ſhould lodge and eat ſeparately; and no communication, between thoſe employed on different cargoes, be permitted, under any pretence whatever. That the ſeveral ſhips who brought clean patents, came from the ſame place, and arrived in port at the ſame time, ſhould, in reſpect to their cargoes, be deemed no reaſons for exemption from the above regulation.

Another diviſion of the area ſhould be allotted for infirmaries; one for perſons taken ill on board, or in the Lazaretto, with

[4] Traité de la Peſte, p. ii. p. 186.

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dubious ſymptoms; a ſecond, for perſons manifeſtly infected; and a third, for convaleſcents from the plague. The firſt and ſecond ſhould conſiſt of ſmall ſeparate chambers; the third may be diſpoſed in wards. Theſe buildings may be of a very moderate ſize, at ſome diſtance from each other, and made as airy as poſſible. The infirmary for convaleſcents ſhould have a fumigating chamber, and a bath.

For the accommodation of paſſengers, two ſeparate buildings ſhould be erected; the one for thoſe with clean, the other for thoſe with touched patents; both being provided with a vaulted room for fumigation, and with a bath. Each apartment ſhould have its ſeparate entry, and other conveniencies; becauſe perſons in quarantine, thoſe excepted who came paſſengers in the ſame ſhip, ſhould have no communication, but at a diſtance. The conſtruction of theſe buildings muſt be adapted to the climate[5]; but as the number of paſſengers from the Levant is inconſiderable, and the Continent is ſeldom in quarantine, the buildings propoſed need not, at firſt, be extenſive, as they may be enlarged afterwards, if found neceſſary.

[5] The building allotted for paſſengers at Marſeilles, is of a long form, conſiſting of two floors. The ground floor is divided into a number of ſmall chambers, each having its ſeparate door. The entrance to the ſtory above is by one common broad ſtaircaſe, which leads to an airy ſpacious corridor, joining to which, in the manner of a cloiſter, is a row of good apartments, each conſiſting of two rooms, one within the other. The privies are at one end of this corridor.

The furniture of the chambers conſiſts of a table, two or three chairs, and a wooden bedſtead, the paſſengers bringing their own bedding from the ſhip. The rooms I occupied had no fire place. The tavern furniſhed the table linen, &c. and the guardians, of which each ſolitary paſſenger has one appropriated to attend upon him, has the care of bringing the dinner, &c. from the barrier of the tavern, at fixed hours. There was only one gentleman, with his ſuite, in the upper apartment, when I entered the Lazaretto, and his quarantine was half over. I could receive books, or any thing of that kind from him, but the receiving any thing from me, would have ſubjected him to begin his quarantine again. I found the corridor very convenient for walking, but fancy, when the apartments are full, each perſon is reſtricted to his own bounds.

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CHAP. II.

The captain, or ſuperintendant of the Lazaretto ought to have a houſe, ſituated, if poſſible, in ſuch a manner as to command a view of the whole encloſure. Near which ſhould be a ſmall tavern, for ſupplying the paſſengers, and others, in quarantine. Neither the captain, nor publican, if they have wives or children, ſhould be permitted, on any account, to keep them in the Lazaretto, nor ſhould they be allowed to have any female ſervants.

At the land gate ſhould be a porter's lodge, and near that a parlour, provided with a double barrier, where perſons may be admitted at certain hours, who wiſh to ſpeak with paſſengers, or with others in quarantine. The barrier ſhould be guarded with a wire lattice, to prevent any thing being conveyed from within, and when the paſſengers go thither, they are always to be attended by their guard.

In ſome convenient place, remote from the buildings, there ſhould be a magazine provided for the powder of the ſhips, which ought to be landed, on their arrival, for the ſecurity of the port.

The laſt building requiſite, is a ſmall laundry, intended for waſhing the foul linen of paſſengers, or others, upon their entrance, after it has been carefully ſmoked in the ſmoking chamber. The linen of each paſſenger, or at leaſt of thoſe arriving in different ſhips, ought to be waſhed ſeparately; and none, after the firſt parcel, ſhould be permitted to be waſhed in the laundry, the keys of which ſhould remain with the captain[6].

The above is a general ſketch for a Lazaretto. The regulations eſtabliſhed at Marſeilles for the interior government of the whole, being the reſult of long experience, are the moſt complete

[6] The want of ſomething of this kind appeared to me a defect at Marſeilles. The baggage of paſſengers is ſmoked, at the ſame time with themſelves, in their chambers. But ſome of the baggage, particularly foul linen, brought from aboard, requires more complete ſmoking; after which, it ought to be waſhed.

BOOK V. I have met with, though, in their application to England, local circumſtances may require ſome variation. The ſame may be ſaid of the regulations regarding the exterior of the Lazaretto; the quarantine of the ſhips; the ſupplying them with proviſions; the unloading the cargo; and the precautions towards the end of the quarantine, before the crew be admitted to prattique [7].

At a little diſtance from the Lazaretto, but cloſe to the water, and in an inſulated ſituation, in reſpect to other quays and buildings, ſhould be the office of health, or prattique houſe; before which ſhould lie the boats belonging to the office. On the face towards the water, a parlour ſhould be contrived, with proper barriers, for the reception of captains of ſhips, when they come to preſent their patents and letters, and to be examined. On one ſide of this, communicating with the office, ſhould be an encloſed quay for the delivery of proviſions, and neceſſaries for the ſhip; and, in order to prevent the boats crews, of different ſhips, from mingling together, the quay may be ſubdivided into two or three diviſions. The proviſions, brought through the office, ſhould be depoſited on the pavement, and thoſe who brought them retiring within the barrier, the crew of the ſhip's boat, who are in waiting, ſhould land and take them away. The ſhip's boat, except on this, or other ſervice expreſsly permitted by the council, ſhould not, under any pretence, come on ſhore, and ſhould be prohibited, under pain of death, communicating with any other boat in their way to or from ſhore, or landing, but at the quay of the office. One or more of the officers of health ſhould be preſent at the delivery of the proviſions; and day-light ſhould always be choſen for this, as well as for all other communication with the ſhips.

[7] In the Traité de la Peſte, ſo often cited in this work, there are ſeveral Memoirs on the ſubject of Lazarettos and Quarantine, in which many abuſes, then prevalent at Marſeilles, are clearly expoſed, and a method of correcting them pointed out. The regulations in uſe at Marſeilles, improved and corrected in the year 1731, were republiſhed there in 1753, under the title of *Memoire ſur le Bureau de la Santé de Marſeille, & ſur les regles qu'on y Obſerve.* Chez Pierre Bey.

Mr. Howard has given a very full account of the regulations at Venice; and has alſo propoſed ſome regulations of his own, which highly merit attention.

CHAP. III.

Reception of ſhips with clean patents—The crew are to perform quarantine on board—Length of quarantine—A propoſal to exempt ſailors from being preſſed immediately after quarantine, and to let their private adventures paſs free of duties—What requiſite to be immediately done, when the ſhip has had, or has any ſickneſs on board.

THE Lazaretto being ſuppoſed ready to receive ſhips, the next thing to be conſidered is, the manner of their reception reſpectively, as they may arrive with clean or touched patents; or unhappily under circumſtances which may ſubject them to the ſame treatment as if the patent were foul.

It is the uſual practice, at Marſeilles, that on the arrival of a ſhip from the Levant, or other place ſuſpected, that the office of health, being apprized by an appointed ſignal, immediately ſends off a boat with an officer, who, remaining at a little diſtance from the ſhip, enquires into the ſtate of the crew, and nature of the patent; and then directs her to anchor either near the other ſhips with clean patents, or at ſome diſtance if ſhe has a touched patent, or has loſt people on the paſſage, or has any ſick on board.

If the patent, by the captain's account, be free from all ſuſpicion, the officer deſires him to repair to the prattique houſe, in his own boat; but if there appear cauſe for ſuſpicion, or the hour be too late, his coming is deferred till next morning; and he is commanded at his peril, in the hearing of the crew, to pay ſtrict regard to the rules of quarantine in the mean while. It would be very proper that the captain, before coming into port, or upon entering the channel, ſhould take an opportunity of reading to the crew thoſe articles of the quarantine laws which immediately concern them, that they may be aware of the penalties they incur by diſobedience; and it would be ſtill better if a printed

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abſtract of theſe articles, diveſted of law terms, were to be hung up in ſome conſpicuous part of the ſhip, for the ſailors to con over.

The captain upon landing at the parlour of the prattique houſe, delivers his patent, log-book, and deſpatches, which are received with the uſual precautions of dipping in vinegar, and ſmoking. The captain is then, upon oath, to anſwer to all queſtions relative to the place he came from, to his voyage, the places he may have touched at, or the veſſels he may have had intercourſe with on his paſſage, and to the ſtate of the crew or paſſengers. His examination being taken down by the ſecretary, is read over to him, for correction or confirmation.

The patent being found free from all ſuſpicion, one or more guardians are put on board the boat, and then the captain, taking in ſuch refreſhments as are neceſſary, returns to his ſhip. Should there be time that day, (if not, next morning) the paſſengers with their baggage are landed at the Lazaretto, and the ſhip lands her powder.

Permiſſion for unloading being given by the council of health, lighters either belonging to the Lazaretto, or to private perſons, are left at anchor before the prattique houſe, and the ſhip's boat, with a ſufficient number of hands, takes poſſeſſion of them. The lighters are from this time in quarantine, and, like all other boats in the ſame circumſtances, carry a diſtinguiſhing flag. They are permitted to come and go by day-light only, but may begin to load early in the morning for the ſake of expedition.

When the cargo is diſcharged, theſe lighters, after being properly cleaned, and the ſails dipped in the ſea, under the inſpection of a guardian, are left at anchor, before the prattique houſe, where they remain to be aired two days before the owners are permitted to take them back. If the patent be touched, they ſhould

ſhould perform four days quarantine, and ought alſo to be ſmoked. When private lighters are employed, it will be neceſſary to guard againſt concealed receptacles for ſmuggling ſmall parcels. CHAP. III.

The lighter is unloaded at the Lazaretto, by the ſailors and the porters deſtined for airing the cargo; and the goods being delivered, the lighter returns to the ſhip, and the porters tranſport the bales to the place appointed for their reception, by the captain of the Lazaretto. The officers of the ſhip may have acceſs to the quay, or where the goods are arranged, during the time that the veſſel is unloading; but after the cargo has been diſcharged, they are no longer admitted; and it is then the reckoning of the quarantine of the goods as well as the ſhip begins.

The captain, the crew, and ſuch paſſengers as it does not ſuit in point of expence to go into the Lazaretto, perform their quarantine on board; but all ſuſceptible baggage, or ſmall parcels, ſhould be ſent to the Lazaretto; the perſons on board, retaining only neceſſary linen and clothes, and theſe ought to be fumigated and waſhed on board, before the ſhip be admitted to prattique. It is the duty of the guardians on board to ſee this regulation ſtrictly executed, and to take care, towards the end of the quarantine, that the ſhip within be every where cleaned and ſmoked. Laſt of all, before the crew are ſet at liberty, ſtrict ſearch ſhould be made by proper inſpectors, to prevent illicit parcels from being concealed.

"If there has been no ſickneſs in the ſhip (ſays Dr. Mead) I "ſee no reaſon why the men ſhould perform quarantine. In- "ſtead of this, they may be waſhed and their clothes aired in "the Lazaretto, as goods, for one week[1]."

[1] Mead on the Plague, p. 77.

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It ſeems to have been the Doctor's opinion, that men as well as goods were to perform quarantine in the Lazaretto, and he aſſigns a reaſon why a quarantine for perſons, on board the ſhip, is inſufficient[2]. The reaſon would ſtand good if ſickneſs actually prevailed on board, and the ſick were not ſeparated from the ſound, it would be like the practice at London formerly of ſhutting up the ſound with the ſick in infected houſes. But if it was meant, in general, that the crew were to perform quarantine in the Lazaretto, the ſhip in that caſe would have been left without hands to take care of her. It is neceſſary the crew ſhould unload the veſſel; when that is done, being then ſeparated from the cargo, the ſhip becomes a proper Lazaretto for them, and, by performing quarantine there, they are not only of ſervice in cleaning and taking care of the veſſel, but their remaining in health is ſome ſecurity for the purification being effectually performed. Should any one on board happen to fall ſick, with ſuſpicious ſymptoms, he is immediately tranſported to the infirmary in the Lazaretto, and if the diſtemper proves to be the plague, it will of courſe occaſion an alteration in the quarantine, both of the ſhip and cargo.

That it is unneceſſary the crew ſhould perform quarantine, where there has been no ſickneſs in the ſhip, is inconſiſtent with all practice. The crew, before opening the hatchways of the hold, are in the ſame circumſtances with paſſengers, and their having remained ſound all the voyage, might, no doubt, equally intitle them to a ſhort quarantine in the Lazaretto[3]. But neither paſſengers nor mariners ſhould be admitted to prattique, without a previous quarantine; becauſe it is a hundred to one, though the ſhip has not begun to unload, that the hold has been opened to take out trunks or baggage, which may have re-

[2] Mead on the Plague, p. 72.

[3] Formerly, at Merſeilles, Paſſengers, with clean patents, performed a quarantine of five or ſix days only; but at preſent, it is prolonged to twenty; and for paſſengers from Conſtantinople, to twenty-eight. Traité de la Peſte, p. ii. p. 178.

mained.

mained untouched from the time of leaving the port, till the arrival in England. That the ſailors, after unloading the goods, ſhould be obliged to a quarantine, has never been doubted, and under the regulations mentioned above, the ſhip appears to be the beſt place for performing it in.

An exception, however, to this, may ariſe in war time, when the compliment of men is far beyond what is required to unload and cleanſe the veſſel. In ſuch caſe, the ſupernumerary men, before beginning to work on the goods, might be admitted to the Lazaretto, at the ſame time with the paſſengers, and ſubjected to the ſame quarantine. I beg leave to add here, that if the ſailors, in theſe ſhips, were invariably to be exempt from being preſſed, for one or two months, after the date of a certificate, from the health office, of having duly performed their quarantine, it would be a ſtrong motive to regular behaviour, and might prevent dangerous conſequences.

I remember hearing an inſtance of the crew of a Turkey ſhip, in quarantine in Standgate Creek, riſing in mutiny, confining their captain, arming themſelves, and making their eſcape on ſhore, to avoid being preſſed by a ſloop of war that lay near. The commander of the ſloop had, very imprudently, come ſeveral times in his boat, and intimated his intention of preſſing the men as ſoon as the quarantine ſhould be over. The fugitives were purſued by the ſloop's people, but defended themſelves in a running fight, and made their retreat good. The conſequences of this adventure, on one ſuppoſition, might have been dreadful; hundreds of houſes on the road to Wapping ſtood ready to give them refuge. The officer of the ſloop was ſeverely reprimanded; but a ſtanding law would be the beſt ſecurity againſt the like accidents in future.

Another circumſtance relative to the ſailors and petty officers, which merits conſideration, regards their trifling adventures of

ſuſ-

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ſuſceptible articles, which either bear a high duty or are prohibited. Were thoſe, upon condition of being fairly delivered into the Lazaretto, to be exempted from all duties, the loſs to the revenue would be very inconſiderable; and one great inducement to concealment and ſmuggling would be removed. The plague was ſuppoſed to have been introduced into Marſeilles, in ſmall parcels of ſmuggled goods, belonging to the ſailors.

The length of the ſhip's quarantine muſt depend on circumſtances, but in general it is ten days leſs than that of the cargo. At Marſeilles ſhips from Conſtantinople and Barbary, are ſubject to a longer quarantine than thoſe from Syria, on account of the frequency of the plague at Conſtantinople, and the ſhortneſs of the run from Algiers or Tunis. The plague in Syria returns at long intervals. A patent, in 1759, would have expreſſed Aleppo being free fourteen years; and one, in 1783, would have certified an interval of twenty years. Ships coming directly from Syria, and which had before touched at no other part of the Levant, ought therefore to ſtand in a different light from ſhips coming from Conſtantinople, or Smyrna; nevertheleſs, conſidering the commerce, unguardedly in this reſpect, carried on between the numerous ports in the Levant, the ſhips from Syria ought not to be entirely exempt from quarantine, though they have a juſt plea for its being abridged[4]. The council of health will judge from circumſtances how far the quarantine may be ſhortened;

[4] Before the Quarantine Act, in 1754, a ſhip from Turkey, with a clean patent, landed her paſſengers at the firſt port in the Channel, if they deſired it. The paſſengers indeed had their ſeparate patents, which were inſpected by the cuſtom-houſe officers before they were permitted to land. But the ſhip poſſibly had been at different ports, and her patents, as to the time of the places being free, were of different tenours. Theſe were not ſubmitted to the cuſtom-houſe officers, who concerned themſelves only with the patents of the paſſengers about to land; they were not acquainted with what had happened on the voyage, nor with the preſent ſtate of the crew. The ſhip laying to, after having received the pilot on board, proceeded to her port, and the paſſengers went on ſhore in the pilot's boat. I myſelf once landed in this manner at Dover.

and that implies the ſhip having no prattique till her patent and other papers have been ſubmitted to their inſpection. CHAP III.

If a ſhip with a clean patent has loſt any of her men on the paſſage, or if ſickneſs of any kind actually exiſts on board, ſhe is then, without regard to her patent, to be deemed ſuſpected, until ſuch time as enquiry ſhall have been made into circumſtances. Should it appear from the accounts of the captain, and declaration of the ſurgeon, that the mortality was occaſioned by chronical, or other maladies well known, the ſuſpicion will of courſe be leſſened; but if the perſons appear to have died after a few days illneſs, notwithſtanding no eruptions were perceived, nor ambiguous ſymptoms can be collected from the ſurgeon's journal, the caſe ought to be held more ſuſpicious. As to ſickneſs that may happen to exiſt in the ſhip, the ſurgeon ſhould prepare a ſtate of the caſes to be delivered by himſelf at the prattique houſe, where the ſurgeon of the Lazaretto ſhould attend in order to confer with him. If the diſeaſe appear to be ſcorbutic, ordinary, or not contagious, the ſick may be left in the ſhip; but if attended with any equivocal ſymptoms, the ſick ought immediately to be tranſported to the infirmary allotted for ſuſpected patents, and put under the care of the ſurgeon of the Lazaretto.

The paſſengers on board of the ſhip ſhould be fumigated on their reception, and afterwards lodged in the quarter of touched patents. Their foul linen ſhould be fumigated and waſhed, and their clean linen, books, and other things in their trunks, ſhould be fumigated in the ſmoking room, before they are carried into the lodging. The length of their quarantine will depend on what happens in the courſe of unloading the ſhip. If all proceeds favourably, and the diſorder of the ſuſpected patents turns out to be not peſtilential, the paſſengers may be removed into the apartments for clean patents to finiſh their quarantine. On the contrary, ſhould the diſorder prove to be the plague, the caſe is then different, and ſome other regulations become requiſite.

CHAP. IV.

Reception of a ſhip with a touched patent—Precautions in unloading her cargo,

A SHIP arriving with a touched patent, the crew being all ſound, goes through much the ſame forms on her reception, as a ſhip with a clean one, only that a guard boat is appointed to watch her in the night. But there is a difference in the precautions taken in landing the cargo.

If the ſhip has loſt any men on the paſſage, there will be much more cauſe for ſuſpicion; and information may be extracted from a careful examination of the captain, the ſurgeon, or other officers ſeparately. Dates are material here. How ſoon the diſtemper appeared after leaving the port? Had the hatchways of the hold been opened? Had there been any communication with Turkiſh veſſels at ſea[1], or with European veſſels coming from other ports of the Levant? How ſoon thoſe taken ill died? Within what time one fell ill after the other? If the clothes and bedding had been deſtroyed? and the like queſtions. Little ſtreſs ſhould be laid on the abſence of eruptions, or external ſigns of the plague, where other circumſtances concur to raiſe ſuſpicion.

Should it appear on the whole moſt probable that the diſtemper of which thoſe on the paſſage had died was an ordinary

[1] Being a paſſenger in a French veſſel, I was once induced, in the Archipelago, to go on board a Turkiſh galley to pay a viſit to the captain at his requeſt, being firſt aſſured that there was no ſickneſs on board. Two days after, on our arrival at one of the iſlands, where we found the plague then raging, we were informed that this very galley, which had got into port before us, had, in the courſe of a ſhort cruiſe, loſt twenty or thirty men in the plague; and had the day before landed as many more, all infected. Our ſhip had come from a place long free from all ſuſpicion; had therefore any thing happened on board, after this intercourſe with the galley, a probable cauſe might have been aſſigned: the hatchways having remained ſhut, the cargo would have ſtood unimpeached.

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one, and that the crew at preſent remain ſound; the following precautions ſhould nevertheleſs be obſerved. Firſt of all, before opening the hatchways of the hold, the ſhip, between decks, ſhould be cleared, and well ſmoked[z]. The cheſts of the ſeamen ſhould be opened upon deck, and their linen, or whatever is ſuſceptible of infection, taken out; all which, together with their hammocks, ſhould be ſuſpended between decks, and the fumigation repeated. The linen is then to be waſhed, and the whole expoſed for ſome days to the open air.

The ſhip being cleanſed and ſmoked, permiſſion may be given to open the hold, and to take out a certain number of bales, the moſt ſuſceptible of infection, to be ſent to the Lazaretto, in order to perform the firſt *ſereine* or airing. Theſe bales, being immediately opened, ſhould be expoſed to the air for three or four days, and in that time frequently turned and handled by the porters. At the expiration of this firſt ſereine, a ſecond parcel of bales ſhould be ſent to the Lazaretto, to perform, in like manner, a *ſereine* of three days. No accidents intervening, either in the ſhip or the Lazaretto, ſhe may be permitted to unload without further interruption.

The paſſengers ſhould perform a quarantine of twenty-five days, reckoning the day of entrance and the day of coming out, as two of the number. All ſuſceptible baggage ſhould be ſmoked a ſecond time in the ſmoking room, three days before the expiration of their quarantine; and they themſelves, with their immediate wearing apparel, ſhould be fumigated in their chamber.

The ſhips quarantine, at Marſeilles, commences after the laſt parcel is landed, and is fixed at twenty-five days; ſhips from Conſtantinople perform five days more. The cargo of ſhips from Conſtantinople performs a quarantine of forty days; from Smyrna, of thirty-five. In caſe of peſtilential accidents in the

[z] See Lind's Eſſay on Fevers, &c. p. 226.

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interim, on board, or in the Lazaretto, the quarantine re-commences. In regard to paſſengers, this laſt regulationmay admit of modification; but an accident happening to any of the paſſengers, agreeably to general uſage, affects the quarantine of both ſhip and cargo.

Theſe terms of quarantine have all along referred to ſhips laden with goods liable to infection: ſhips whoſe cargoes are deemed not ſuſceptible, as grain, fruit, wine, &c.[3] ſhould be ſubject to a much ſhorter quarantine. But they ought not to be admitted without precautions; for though the merchandiſe may not be ſuſceptible, the materials employed for package may, and for that reaſon they ought to be ſtripped off, and left in the Lazaretto. Caſks of oil ſhould be dipped in the ſea, and other caſks expoſed to the air; but cordage and ſacks ſhould be changed.

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Manner of proceeding, when the plague has ſhown itſelf in the courſe of the voyage—When ſickneſs of a ſuſpicious kind, actually exiſts in the ſhip—When that ſickneſs proves to be the plague—When the porters in the Lazaretto are infected—Propoſal for burning an infected ſhip, with her cargo, conſidered—To fumigate the merchandiſe in the Lazaretto, propoſed—The purification of merchandiſe, by ventilation, not equally effected in all ſeaſons.

WHERE it appears, from the examination of the ſurgeon or officers, that the perſons who may have died on the paſſage, actually died of the plague; or where any ſickneſs, attended with ſuſpicious ſymptoms, exiſts in the ſhip, ſtricter precautions become neceſſary.

[3] See before, book iv. c. 3.

A ſhip,

A ſhip, with perſons on board manifeſtly infected, will not attempt coming to the Lazaretto; a particular ſtation being appointed for veſſels under ſuch circumſtances[1]: but the caſes ſuppoſed above, may happen not only to ſhips arriving with touched, but even to thoſe with clean patents, and proviſion ſhould therefore be made for them.

If the mortality happened early in the voyage, and ſeveral weeks have elapſed without further conſequence, there will be leſs to apprehend on the part of the crew, and the ſhip may be permitted to unload, uſing due precautions.

She ought, in the firſt place, to moor at a diſtance from other veſſels; to be guarded (beſides the two guardians on board) by a guard-boat without; and when her boat comes on ſhore for proviſions, boats of other ſhips ſhould not be allowed to approach the place where the proviſions are delivered.

The paſſengers ought to be immediately landed, carrying along with them only ſome wearing apparel; the remainder of their baggage, bedding excepted, being left on board. Upon landing at the Lazaretto, they ſhould be carried firſt to the tepid bath, and accommodated with bathing clothes, their own clothes and linen, in the mean while, being ſuſpended in the fumigating chamber. From the bath, they are to be conducted to their apartment, in the quarter allotted for touched patents, and thither their clothes ſhould be brought, after fumigation.

The ſick are next to be tranſported to the infirmary deſtined for the ſuſpected. Where a gown and bed-linen ſhould be prepared for them, till their own clothes be purified, by waſhing and fumigation.

[1] By the Quarantine Act, when the plague appears on board of a ſhip to the northward of Cape Finiſterre, ſhe is, with all ſpeed, to proceed to St. Helen's Pool.

The ſhip is then to be cleaned and ſmoked between decks, in the manner before deſcribed: the powder being firſt landed. The trunks, &c. of the paſſengers, if not in the hold, ſhould be ſmoked with the ſhip, and then ſent to the Lazaretto, to be opened, fumigated, and aired more completely.

The ſmoking of the ſhip ſhould be twice performed; the ſailors ſhould be ſupplied with ſoap and freſh water, for waſhing; and ſhould be made to air their hammocks and bedding, daily, if the weather permits.

If no other perſon of the crew falls ſick in the courſe of a week, and no ſymptoms of infection appear in the ſuſpected ſick, put on ſhore at the Lazaretto, permiſſion may be granted for opening the hold, and taking out a parcel of bales, which are to paſs a *ſereine* of five days. Two other parcels of bales, in ſucceſſion, are each to perform a *ſereine* of three days; after which, the veſſel may be allowed to diſcharge her cargo.

In this manner the ſhip would remain eight days before the firſt *ſereine*, eleven during the *ſereines*, and twenty after landing her cargo; making in all, including the time taken up in unloading, a quarantine of between forty and fifty days.

Should the diſeaſe, of the ſick, ſent to the Lazaretto, really be the plague, the diſcovery will be made before the expiration of the week, and will of courſe prevent further proceedings, in reſpect to the cargo; for it ought to be an invariable rule, in ſuch a caſe, not to permit the hold to be opened, till the ſtate of the crew on board be aſcertained.

In this interval the ſhip, between decks, ſhould be carefully aired and ſmoked; and at the end of a fortnight, no more ſickneſs intervening, leave may be given to begin the *ſereines*, as before directed.

But

But ſhould it ſo happen, that any of the porters, at work on the cargo in the Lazaretto, contract the infection, either during the *ſereines*, or after the whole cargo is diſcharged, the management muſt be different, according to circumſtances.

If the infection ſhould diſcover itſelf during the *ſereines*, an immediate ſtop ſhould be put to unloading, the hold ſhould be well ſecured, and, after a fortnight's delay, the crew remaining well, the veſſel might be ſent under convoy to St. Helen's Pool.

But if the goods be already landed, it may perhaps be better to attempt their expurgation in the Lazaretto, than to reſhip them, unleſs there were a proper foul Lazaretto at St. Helen's Pool.

The paſſengers who were landed at the ſame time with the ſick, ſhould not be ſet at liberty till three days after the laſt *ſereine*; but in caſe of the ſuppoſed interruption, by new accidents, it does not ſeem requiſite that their quarantine, conſidering how long they have been ſeparated from the ſhip and cargo, ſhould be prolonged more than thirty days; their baggage being always underſtood to be ſtrictly purified.

In attempting the expurgation of the goods already landed, and which on the firſt alarm will have been removed into the foul encloſure, the porters, after a ſpace of eight days, during which they ſhould frequently waſh and fumigate their clothes, and lodgings, may cautiouſly return to work on the goods. Firſt on the bales that have paſſed the *ſereines*, and afterwards on ſuch as may not have been opened. But if any freſh accidents of infection happen among the porters, the unopened bales had better remain in that ſtate, ſhould it be the ſummer ſeaſon, till the winter. It is not, however, conceived, ſuppoſing the bales to be infected, that they would be purified by that time, any more than bales remaining in a ſhip's hold; but the cold ſeaſon being leſs,

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leſs favourable to contagion, the porters would be expoſed to leſs riſk. In all the accounts I have ſeen of the plagues at London, they always declined rapidly in November and December.

It was the opinion of Doctor Mead, that goods which ſhow themſelves to be contagious, from their infecting thoſe who handle them, ſhould at once be deſtroyed[2]. In another place he goes ſtill farther, "If a ſhip comes from any place where the "plague raged at the time of the ſhip's departure from it, with "more than uſual violence, it will be the ſecureſt method to "burn all the goods, and even the ſhip."

The raging with more than uſual violence would ſeem to imply, that the ſame method was not neceſſary, if the plague, at the time of the ſhip's departure, exiſted only in a moderate degree, and that, under ſuch circumſtances, an attempt might be made to purify the goods, inſtead of condemning the whole cargo to the flames. I am not certain whether this was Dr. Mead's opinion, but the legiſlature, without regard to the diſtemper's raging more or leſs, has thought proper to exclude every ſhip from Britiſh ports, which does not bring a patent, declaring the place where ſhe loaded, abſolutely free even from ſuſpicion of the plague, unleſs ſhe and the merchandiſe have performed a quarantine in one of the foreign Lazarettos.

By the 13th clauſe in the expired act, made in the ſeventh year of George the Firſt, his Majeſty, in council, was expreſsly empowered, when the plague exiſted in any foreign country, to order ſhips coming from infected places, or laden with goods from ſuch places, or having on board any infected perſon, to be burnt, with the whole of their cargo, or ſuch part of it as might be judged neceſſary[3]. But in both the Quarantine Acts of George the

[2] Mead on the Plague, p. 80.

[3] On the 16th of June, 1721, the following meſſage was delivered to the Commons from his Majeſty—'His Majeſty being informed, that two ſhips, called the Briſtol Merchant,

the Second, this clauſe was entirely left out; and if once it be admitted, that infected goods may, by certain means, be effectually purified, ſo ſevere a meaſure, as that of burning the ſhip and cargo, need only be recurred to under extraordinary circumſtances. CHAP. V.

The preſent ſyſtem of quarantine proceeds on a ſuppoſition, that infected goods are capable of being purified, in a certain time, by ventilation. If this be not ſuppoſed, quarantine is no more than a very undeciſive trial whether the goods be contagious; I ſay undeciſive, becauſe though the goods be really contagious, thoſe employed in unloading or opening them may poſſibly eſcape unhurt, in like manner as it ſometimes happens, that of ſeveral perſons frequenting the chamber of a patient in the plague, no one is infected. It is certainly, however, a ſtrong preſumption either of the goods being not tainted, or of the ſtate of the air being not favourable to contagion, when thoſe employed in handling them, receive no harm. But, beſides this, it is the common opinion, that the peſtiferous effluvia, conveyed in ſubſtances cloſe packed up, when opened, either evaporate during a long expoſure to the air, or are otherwiſe deſtroyed by its agency. In conſequence of which, thoſe who aſſiſt at the firſt opening of the goods, are

' chant, and Turkey Merchant (now lying under quarantine) did arrive from Cyprus,
' and other parts of Turkey, infected with the plague, and have cotton, wool, and
' other goods on board, which are dangerous to ſpread the infection; and conceiv-
' ing it neceſſary for the health of his ſubjects, that the ſaid ſhips, and their ladings,
' ſhould be burnt and deſtroyed, and that a reaſonable ſatisfaction be given to the
' maſters, owners, and freighters, hath, by advice of his Privy Council, cauſed the
' value thereof to be computed by his Majeſty's officers, and ordered thoſe compu-
' tations to be laid before the Houſe of Commons, that proviſion may be made for
' ſatisfying the ſame.'

On the 22d of June, a ſum not exceeding 23935 l. to be applied to the ſatisfaction of the maſters, owners, &c. of the two ſhips, which are intended to be burnt and deſtroyed, for the preſervation of his Majeſty's ſubjects againſt infection, was granted, in a grand Committee of Supply.

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conſidered as being in much more danger of infection, than thoſe who repack them, after an airing of forty or fifty days.

Quarantine therefore is not merely an experiment to determine whether the merchandiſe retain infection; but the ventilation, during the quarantine, is the means of purifying them, if they happen to be infectious. The terms eſtabliſhed for ventilation may appear to be unneceſſarily long; but it has very juſtly been remarked by Doctor Mead, "as we do not know how "much time preciſely is neceſſary to purge the interſtices of "ſpongy ſubſtances from infectious matter by freſh air, the cau-"tion cannot be too great in this point[4]."

It is much to be wiſhed, that means could be deviſed for the expurgation of merchandiſe, more expeditiouſly than by ſimple expoſure

[4] Mead on the Plague, p. 78. See alſo Muratori.

"L'intera quarantena è di 40 di, (ſays Muratori) dal che venne il ſuo nome, e tanto "ſi ſuol richiedere negli urgenti ſoſpetti di peſte. Nulladimeno, a me ſembra meri-"tevole di molte rifleſſione, la fondatiſſima ſentenza di Lodovico Settala, e del P. Mau-"rizio da Tolone, dell' ultimo dè quali rapportero i ſentimenti, e la ragione. La "pratica, dice egli, di 20 & piu anni mi da' animo di francamente aſſerire eſſere baſtevoli "20 giorni de quarantena, benche l'uſo ſia intradotto di 40. certo è, Che chi avra ma-"neggiato robe infette, o attratta aria appeſtata, in guiſa che gli ſi ſia attaccato il male, "proverà prima che paſſino 15 di, qualche grave accidente, comme di febbre, &c. "Quindi è, che ſe qualche perſona ſoſpettà ſi fara', nell'entrare in quarantena, lavata "ben con aceto, mutando le veſti, e inſieme profumando tutte le altre ſuppellettili, nè "avrà ſentito ombra, o apparenza di male, ſi puo, paſſato il venteſimo giorno, licen-"ziare come ſicura di ogni infezione; avendo io più volte oſſervato, non eſſervi in-"fetto, che prima dè 15, evidentemente non ſi conoſca, o abbia paſſato quel termine "con ſalute, e poi ſi ſia ſcoperto appeſtato. Vero è che ſi traſcuraſſero le cautele "ſuddette, & le diligenze preſcritte ne' Lazzaretti, potrebbe la peſte divampare non "ſolo dopo i 30, ma anche dopo i 40 giorni—Avverto, che la mutazion dell' aria "fatta da luogo infetto in altro ſano, è cagione che la malignità del morbo ſi dia "piu preſto a conoſcere, che ſi foſſe fermato nel primo ... Neſſuno adduce una "ragion ſoda e vera, per cui ſi aſſegnino 40 giorni alla purga ſuddetta. Ma poſto per-"vero, che la peſtifera qualità del male non può ſtare piu di 15 di'a ſcoprirſi, hanno "da baſtar 20 giorni. E per le robe, quantunque infettiſſime, ſi purgano queſte

expoſure to the air; and perhaps fumigation, which, on other occaſions, is much practiſed abroad in times of peſtilence, might be attempted here with ſome proſpect of ſucceſs. CHAP. V.

The halls or warehouſes for airing the goods, though open to all quarters, muſt nevertheleſs, in England, be provided with occaſional defences againſt the weather, ſo contrived as, when neceſſary, to ſhut up the halls on all ſides, ſufficiently cloſe for fumigation. Were the moſt ſuſpected goods to be thus ſmoked once or twice, before the porters returned to work upon them, they would reſume their labour with more confidence, and have

" in 24 hore, a ſegno che ſe potranno dipoi maneggiare con tutta ſicurezza." Muratori, lib. i. c. 12.

The complete quarantine (ſays Muratori) comprehends a term of forty days, from which circumſtance it derives its name; and in all extraordinary apprehenſions of the plague, the performance of it is ſtrictly required. Nevertheleſs, the well-founded opinion of Lodovico Settala, and father Maurizio of Toulon, appears to me highly deſerving of attention; and I ſhall here give an account of the opinion and reaſoning of the latter. The experience (ſays father Maurizio) of more than twenty years, encourages me to aſſert boldly, that twenty days of quarantine are ſufficient, though cuſtom has introduced the practice of forty. It is certain, that whoever may have caught the plague, by handling things infected, or breathing peſtiferous air, the effects of the contagion will diſcover themſelves in ſome alarming ſymptoms, as fever, &c. within fifteen days. Hence it is, that if any ſuſpected perſon, upon entrance into quarantine, has changed his apparel, been well waſhed with vinegar, and, together with the furniture he brings with him, been fumigated, without having been ſenſible of, or having had the appearance of any infection, he may be diſmiſſed as free from any infection, at the end of twenty days; I having obſerved frequently, that the infection always diſcovered itſelf plainly before the expiration of fifteen days, and never later than that period. Indeed, if the precautions and rules preſcribed in the Lazaretto, are neglected, or careleſsly obſerved, the plague may diſcover itſelf, not only after thirty, but even forty days. I muſt obſerve, that the change of air from a place infected to one that is healthy, cauſes the malignity of the diſeaſe to diſcover itſelf ſooner than if the perſon had remained in the firſt place. No one has produced a true and ſolid reaſon why forty days of quarantine ſhould be neceſſary for expurgation. But taking it for granted, that infection cannot remain latent above fifteen days, twenty days quarantine is ſufficient for perſons. As to goods and other things, however highly infected, their expurgation may be completed in twenty-four hours, inſomuch that they may be handled with perfect ſafety.

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a better chance of eſcaping. Contrivances alſo might be made for conveying ſmoke, by a pipe, to particular bales, or parcels of goods; which being thus partially fumigated, might be handled with leſs danger, and moved to a place better fitted for thorough ſmoking. Such goods as are liable to be injured by ſmoke muſt be kept apart; but materials might poſſibly be found, the ſmoke of which would be harmleſs, in reſpect to moſt of the goods ſuſceptible of infection.

Fumigation of the halls, in the manner now propoſed, is not, ſo far as I know, practiſed in any of the foreign Lazarettos; though the ſmoking infected houſes and furniture is a noted practice on the Continent. The Italian and French writers have ſaid enough to encourage the attempt of transferring the practice of ſmoking, with a more extenſive application to Lazarettos; and, the experience of a later writer, in other contagions, ſeems to confirm what had before been aſſerted from ancient experience, of the benefit of fire and ſmoke, in eradicating peſtilential contagion from infected ſubſtances.

"Wherever infection lurks, and in whatever materials it is "harboured, the admiſſion of the pureſt air, or the moſt perfect "ventilation, will often not avail, either in removing or abating "its activity. It now gives me the higheſt ſatisfaction to affirm, "that I ſeldom or never knew a proper application of fire and "ſmoke to be unſucceſsful, in producing the happy conſequence "of effectually purifying all tainted places, materials, and ſub-"ſtances[6].

"It is not to be doubted but that, excepting the true plague, "there has been an infection fully as peſtilential, and as "mortal, in ſome ſhips, as in any other place whatever; yet I "never heard of any ſhip, which, after having been carefully "and properly ſmoked, did not immediately become healthy.

[6] Lind's Diſſertation on Fevers and Infection, p. 225.

" And if afterwards they turned ſickly, it was eaſy to trace that " ſickneſs from other infected ſhips, jails, and the like places."

After deſcribing the mode of ſmoking ſhips, he adds, " From " the known and experienced efficacy of theſe proceſſes, it ap- " pears that fire and ſmoke are the moſt powerful agents for " annihilating infection; and it may be preſumed even the plague " itſelf. I have known in ſeveral ſhips, where there are the " faireſt opportunities of trying things of this nature, that the " contagion of the ſmall-pox has been entirely ſtopped by means " of wood fires, ſprinkled with brimſtone, kept burning and " cloſely confined in the infected place[7].

" I ſhall laſtly deliver my ſentiments with regard to the pu- " rification of goods, moveables, clothes, &c. which are ſuſ- " pected to harbour contagion; and I cannot but take notice, that " the uſual cuſtom of only unpacking and expoſing ſuch mate- " rials to the open air, is, in many inſtances, inſufficient to de- " ſtroy the latent ſeeds of the diſeaſe[8]."

In favour of a practice which I have had few opportunities of ſeeing carried to any extent, I have produced the reſpectable authority of Dr. Lind, who ſpeaks from long and wide experience, in various contagions; and I perfectly concur with him in thinking it may reaſonably be preſumed the ſame means would prove ſucceſsful in peſtilential contagion: indeed the experience of other nations ſhows it to be more than merely a preſumption[9].

As the entire cargo of a ſhip can hardly be ſuppoſed to be infected, and experience has ſhown that infected goods may be purified by time and ventilation, the neceſſity of deſtroying a

[7] Lind's Diſſertation on Fevers and Infection, p. 227. 229, 231.

[8] Ibid. p. 235.

[9] Another opportunity will occur of entering more at large upon the ſubject of fumigation.

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Should the infection repeatedly ſhow itſelf upon opening or working on the bales already landed, notwithſtanding the precautions recommended to the porters of the Lazaretto have been duly obſerved; or ſhould the infection ſpread among the crew on board, notwithſtanding the ſpeedy removal of the ſick, the ſhutting up of the hold, ſmoking the ſhip, and the intermiſſions of labour before deſcribed; there will be reaſon for apprehending, either that the ſhip and cargo are infected in an extraordinary degree, or that the conſtitution of the air is favourable to contagion.

This peculiar conſtitution has been already mentioned frequently; and I have endeavoured to ſhow its concurrence to be ſo indiſpenſably neceſſary to ſpread the infection, that in Turkey, when it happens to be abſent, intercourſe with infected places is kept up without material conſequence [10]. Its rare recurrence in England is one reaſon, amongſt others, aſſigned for that country having ſo long eſcaped the plague, notwithſtanding its extenſive commerce with the Levant. But, in the viciſſitude of aerial conſtitutions, that the true peſtilential one is entitled to a place in the Britiſh climate, is ſufficiently confirmed by experience.

In the caſes now ſuppoſed, if the part of the cargo remaining on board conſiſts of cotton, or of ſuſceptible goods of ſmall value, which would hardly defray the expences of a long quarantine, the moſt adviſable meaſure would be to deſtroy the veſſel with the cargo, and to oblige the crew to perform a quarantine of thirty days, in the Lazaretto, after the deſtruction of the ſhip. But if the cargo conſiſts of ſilk, or be of ſufficient value, to bear the expence of delay, ſome more trials might be made on the goods, before condemning them abſolutely.

[10] See before, book iii. chap. 6.

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In this view, after an intermiſſion of labour for fifteen days, in order to aſcertain the ſtate of the crew, the hold might again be opened, and a new parcel of bales be landed. Should theſe diſcover no ſigns of infection in the Lazaretto, the remainder of the cargo might ſafely be diſcharged. But in caſe of new accidents intervening, either on board the ſhip, or in the Lazaretto, a ſtop ſhould be put to further proceedings, till a more favourable ſeaſon.

That ſome kinds of weather may be more favourable than others, for the expurgation of infected goods, is very probable[11]; but it remains to be determined, by experience, whether, in a peſtilential conſtitution of the air, the ſame goods require much longer time than uſual, to be diveſted of their contagious property.

[11] Muratori, on this ſubject, cites the authority of P. Maurizio da Tolone Cappucino, who ſpeaks with much confidence, "Spirando Scirocco, o aria umida e "piovoſa, avvertano che l'infezion della robe, anche eſpoſte all' aria, non ſi leva, "ma ſi fomenta, facendoſi talvolta la quarantena intera ſenza purgarſi. Si deve "anche temere d'un' inconveniente nel verno, che non ſuole accadere la ſtate, cio "è ch' in tempo freddo, o ſpirando la tramontana, ſi naſcondono & ſi concentrano "ne i panni, & nelle robe gli ſpiriti peſtilenziali, i quali, venuto poi il caldo, fanno "ſtrage orribile. Ma in qualunque tempo che corra, ſe ſaranno ben fatti i profumi "alle robe, e verrà ben cuſtodita la perſona, & governata coll' aceto, & colla muta-"zione de i panni, la quarantena ſarra mezzo ſicuro per accerta ſi ſe la perſona abbia "condotta ſeco l'infezione, e per liberarnela ancora." Muratori, lib. i. c. 12.

When the ſouth-eaſt wind blows, or the weather is moiſt and rainy, it is obſerved, that the infection in goods, though they be expoſed to the air, is rather fomented than diſſipated, ſo that thecomplete quarantine ſometimes may be performed, and the goods remain not purified. An inconvenience may alſo be apprehended in the winter, which does not uſually happen in the ſummer, namely, that in cold weather, or when the north wind blows, the peſtilential miaſmata are concentrated, and lurk in the cloaths and other goods, till ſet looſe by the return of heat, when they cauſe terrible devaſtation. But, whatever the weather may be, if the fumigation be properly applied to the goods, and moreover the change of apparel, and waſhing with vinegar be properly managed with reſpect to perſons, the quarantine will be a ſure method of aſcertaining whether the perſon has brought the infection along with him; as alſo of purifying him, if infected.

This

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This laſt circumſtance remaining, as I conceive, doubtful, it may be proper, during a ſuſpected ſeaſon, to double the quarantine of a ſhip, whoſe cargo had given proof of infection; and to permit no ſhip, arriving from a place where the plague had ſhown itſelf after her departure, to diſcharge her cargo in the months of July, Auguſt, or September.

Such multiplied reſtraints and delays muſt inevitably fall heavy on trade, and prove highly diſtreſſing to the merchants. But the circumſtances requiring ſuch extreme rigour, will very ſeldom occur; and if by ſuch delays, the ſhip and cargo can be ultimately ſaved, without endangering the public ſafety, it ſurely is preferable to deſtroying the whole property by fire or water.

As to the inconveniences to which the merchant is ſubject, in ſuch unfortunate times, it ſhould be recollected that this temporary and partial interruption of commerce is intended to prevent a much more extenſive evil; for ſhould the plague once pervade the country, a ceſſation of trade and commerce, internal as well as external, muſt ſoon follow. In the mean while, if the individual has any right to indemnification, when the deſtruction of his private property is judged a neceſſary meaſure; the equity of the legiſlature will not leave the merchant, to whom no blame is imputed, without ſome compenſation for what he may ſuffer in conſequence of the extraordinary length of quarantine, a meaſure equally intended for the public ſafety [12].

It

[12] Though the power given by the expired act, in the 7th of George the Firſt, to order an infected ſhip, with the whole, or part of her cargo, to be burnt, is not expreſsly enacted by the Quarantine Act now in force; yet, from the following inſtance, it would ſeem as if a like power were implied in the general power given to his Majeſty, to iſſue ſuch orders concerning quarantine, and the prevention of infection, as he may judge neceſſary.

In the year 1754, ſoon after the Quarantine Act, 26th George the Second, took place, the ſloop Fawey, Iſaac Clemens, commander, from Algiers, was ſunk at ſea, by order of council. Ingram's Hiſtorical Account, p. 197.

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It may perhaps be ſaid, that without entering into ſo many intricate diſtinctions, a preferable way would be at once to interdict all intercourſe with ſuſpected places; and to permit no ſhip whatever, having the plague on board, to enter a Britiſh port.

Acts of parliament to the firſt purpoſe were made in 1722, in 1728, and in 1733; but the power granted to his Majeſty of prohibiting commerce, was always cautiouſly limited to the ſpace of twelve months. For infected ſhips, one port is allotted by law, all others being ſhut to them.

The proviſion made by the act, 26th of George the Second, for veſſels on board of which the plague may diſcover itſelf to the northward of Cape Finiſterre, is worthy of the juſtice, as well as of the humanity of the nation; both being intereſted in offering a refuge for them, under whatever circumſtances they may happen to arrive. Imagination can hardly draw a picture of more dreadful diſtreſs, than that of a ſhip's crew at ſea afflicted with the plague. In ſuch circumſtances, to drive them in a hoſtile manner from the coaſt where they are naturally entitled to find ſhelter, would ſeem to betray the ſelfiſh ſpirit of barbarous

The hiſtory of this tranſaction appears very ſingular. The veſſel departed from Algiers with a clean patent; had prattique at Gibraltar, after a quarantine of ſix days; arrived in Portland Road, after a month's paſſage, where the captain and all the crew went on ſhore, and ſeveral gentlemen from Weymouth came on board. She then proceeded to her deſtined port in Guernſey, where ſhe was at firſt well received, but, within twenty-four hours after her arrival, was ordered to depart inſtantly, under pain of being fired upon by the fort. She performed a quarantine of near four months, at the Muther Bank, during which the crew remained all well; and on the 8th of March was ſunk, under the care of the Arundel man of war, thirteen leagues off the Start.

There certainly muſt have been reaſons, which do not appear in the narrative, for ſuch extraordinary treatment. If danger was apprehended, the deſtruction of the veſſel was indiſcreetly delayed: or was it neceſſary to wait the commencement of the Quarantine Act, which took place the 1ſt of March?

times,

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times, however it may aſſume the ſpecious garb of public expediency.

What are men in ſuch a ſituation to do? What deſperate meaſures may they not have recourſe to? Will penal laws reſtrain them from attempting to eſcape from a death more terrible, more imminent, than that denounced by the legiſlature? Will a captain's authority avail, in ſight of a defenceleſs ſhore, preſenting no barriers but laws, which, in the conception of men, actuated by inſtant terror, may be many ways eluded? How dreadful may be the conſequence of one ſhip, under ſuch circumſtances, abandoned by the crew, and left a prey to the ſons of rapine who prowl on ſome parts of the Britiſh coaſt? It cannot be expected, that men proſcribed, in a manner, by their country, will in return ſolicitouſly conſult its ſafety, by ſetting fire to the ſhip they abandon.

On the other hand, when a captain has it in his power to hold out to his men a ſecure haven ready to receive them, where they will meet with every human aid, and where their preſervation will be equally conſulted with that of the community to which they belong, they will think no longer of violences ſuggeſted merely by deſpair, and the uſual ſpirit of ſubordination and diſcipline will take place of that of mutiny and turbulence.

But if the deſperate attempts of an infected crew are at all times to be guarded againſt, redoubled vigilance is required when the peſtilential conſtitution is ſuppoſed to be impending. Irregularities at other times, are often attended with no material conſequence; but when the ſtate of the air is favourable to contagion, the ſmalleſt ſpark may raiſe a conflagration. This, from what I have had occaſion to ſee in Turkey, is ſo ſtrongly impreſſed upon me, that I cannot help thinking ſound policy, all other conſiderations out of the queſtion, urges the neceſſity of having proper conveniences provided for the reception of thoſe unhappy ſufferers, who at

preſent

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preſent ſtand, as it were, proſcribed by the laws in ſeveral places in Chriſtendom. Their irruption into the country, in the dangerous ſeaſon now ſuppoſed, and the ſpoils of the abandoned veſſel clandeſtinely diſperſed (a conſequence naturally to be expected) might widely ſcatter the contagious goods, before the police was alarmed, and beyond its power of detection afterwards. A like reaſon, in ſuch times, juſtifies the rigid injunction of ſtricter regulations in the quarantine at the Lazaretto.

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Precaution more urgently neceſſary, when the plague prevails on the Continent—The project of building regular Lazarettos, ſubmitted, at ſundry times, to the conſideration of Parliament—Plans and eſtimates required and delivered—Money granted towards purchaſing lands, &c. for the erecting Lazarettos—Plan of a Lazaretto propoſed, in 1758, *by the late Doctor Alexander Ruſſell.*

WHEN the plague is epidemical in any of the neighbouring ſtates, on the Continent, apprehenſions ariſe, from the ſhortneſs of diſtance, and the facility of acceſs by a hundred unguarded avenues, that recent infection may be imported in full force, and ſpread with reſiſtleſs violence. Theſe apprehenſions are not groundleſs; and, while the popular terror prevails, the ſtricteſt regulations, impoſed by the police, are ſubmitted to without much murmuring. But perhaps the vicinity of the ſource, and freſhneſs of infection imported, are not more to be dreaded than the vicinity of the peſtilential conſtitution of the air, which has been obſerved to paſs progreſſively from one region to another.

When, therefore, the diſtemper declines in the neighbouring ſtates, though the people in England, recovering confidence, begin to ſhow impatience under thoſe reſtraints to which the preſervation of the country may till then have been owing, the council of health ſhould not, through miſtaken lenity, remit its vigilance. The calm on one ſide of the Channel, may happen to be only the prelude to a ſtorm on the other; and relaxation, in the decline, when danger is thought to be over, may prove of more fatal conſequence than in the height of the peſtilence.

The approach of the peſtilential conſtitution, is ſlow, ſilent, and imperceptible; no human barrier can be oppoſed to it: but if it do not meet with latent ſeeds of contagion to animate or invigorate, it will paſs on, perhaps harmleſsly, to other regions. The prevention of a concurrence ſo deſtructive to mankind, is the grand object of quarantine; and, ſo far as hitherto known, is only to be attained by regular Lazarettos well conducted.

The building regular Lazarettos in England, has, at ſeveral different times, been under the conſideration of government. In the year 1743, the plague then raging at Meſſina, a memorial, dated the 27th of September, propoſing the building of Lazarettos, &c. for the airing of goods then under quarantine in Standgate Creek, was preſented to the Treaſury, from the Commiſſioners of the Cuſtoms.

In the year 1752, the ſcheme of laying open the Levant trade, and for which a bill had paſſed in the Houſe of Commons in 1743, being again revived, the ſubject of Lazarettos, becoming perhaps more neceſſary on account of the projected alteration of the Company's charter, was introduced into Parliament, and the Commons, on the 13th of February, appointed a day for taking into conſideration, in a Committee of the whole Houſe, the moſt proper and effectual manner of performing quarantine.

Several

Several perſons were called for examination; and copies of the memorial from the Commiſſioners of the Cuſtoms, as alſo a report of certain officers of his Majeſty's yards at Deptford and Chatham, dated 11th of January 1752, relating to a proper place on the river Medway, for building a Lazaretto, were laid before the Committee.

On the 5th of March, the following reſolutions were reported.

That the preſent manner of performing quarantine, by airing goods on board hoys and veſſels, is not well calculated to prevent the infection; and is inconvenient and expenſive to the merchant.

That for the better and more effectual performance of quarantine, a Lazaretto ſhould be erected.

That Chedney Hill, near the upper part of Standgate Creek, in the river Medway, is a proper place for a Lazaretto.

The two firſt reſolutions were unanimouſly agreed to by the Houſe; and the third, upon the queſtion being put, was alſo agreed to. An addreſs was then preſented to his Majeſty, requeſting that he would order plans of a Lazaretto, with eſtimates of the charge and building, and maintaining the ſame, to be prepared and laid before the Houſe, at the beginning of next Seſſion of Parliament. To which a gracious anſwer was returned [1].

Nothing more appears to have been done in the buſineſs, till the year 1764, when it was revived in the Houſe of Commons, on the 20th of March, by a motion for reading the reſolutions of the Houſe of the 5th of March, 1752. An addreſs, like the former, for plans and eſtimates, being unanimouſly agreed to, was accordingly preſented to his Majeſty.

[1] Journals of the Houſe of Commons, vol. 26.

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On the 9th of April a plan and eſtimates were preſented to the Houſe, by Lord Charles Spencer; and, on the 13th, a copy of the report of the Navy Board to the Lords of the Admiralty, relative to the expence of a floating Lazaretto, now moored in Standgate Creek, was preſented by Lord Howe.

On the 17th of January, 1765, his Majeſty was addreſſed, to order to be laid before the Houſe, the plans and eſtimates of a Lazaretto, propoſed to be built on Chedney Hill, near Standgate Creek.

On the 11th of March, ſeveral plans of a Lazaretto, propoſed to be built on Chedney Hill, and ſeveral papers containing Mr. Stuart's report, eſtimate, and paper of references, relative to the building of the ſaid Lazaretto, were referred to the Committee of Supply. On the 26th, it was reſolved in the Committee, and agreed to by the Houſe, that a ſum not exceeding 5000l. be granted to his Majeſty towards building a Lazaretto.

There, I believe, the matter reſted till 1772, when ſome doubts ariſing whether his Majeſty, by the Act of the 26th of George the Second, was ſufficiently empowered, to contract and agree for the abſolute purchaſe of lands, tenements, &c. to be ſettled unalienably in the Crown, for making, erecting, and eſtabliſhing Lazarettos, a bill for explaining the clauſe, relative to Lazarettos, in the former Act, was brought into Parliament the 14th of May, and paſſed the 3d of June.

By this Act the Lords of the Treaſury were empowered to purchaſe any tenement, lands, &c. conveniently ſituated for the purpoſes of the Act; and to order payment to be made of the 5000l. already granted, for ſuch purchaſe; and in caſe that ſum ſhould not be ſufficient, then, out of the monies ariſen from the duties on merchandiſe exported and imported. The meſſuages, when purchaſed, unalienably veſted in the Crown, for the purpoſe

poſe of making, erecting, and eſtabliſhing there a Lazaretto or Lazarettos. CHAP. VI.

By the Quarantine Act, 26th of George the Second, whenever his Majeſty, by and with the advice of Parliament, ſhall direct Houſes or Lazarettos to be provided for the receiving and entertaining of perſons obliged to perform quarantine, or for the depoſiting, opening, and airing of goods, and merchandiſe, liable to perform quarantine, it may be lawful to erect the ſame on common or private grounds, making ſatisfaction to the proprietors. Temporary Lazarettos only ſeem to be intended in the above clauſe, but the power given, by the Explanatory Act, in 1772, is for erecting and eſtabliſhing permanent Lazarettos, for the reception of perſons and goods.

The propriety, or rather the neceſſity of eſtabliſhing regular Lazarettos, appears ſufficiently from the parliamentary reſolutions on the ſubject, formed upon mature deliberation, after a ſtrict examination of perſons, the beſt able to give information. All ſeems to have been done that could be expected of the Legiſlature; what remains, depends on the executive power, which, it is to be hoped, may one time or other find leiſure to reſume a project that has been more than once in agitation, both before and ſince the interference of Parliament[2].

I have

[2] In the year 1757, or 1758, England was alarmed by reports of the plague's having appeared in Portugal. Upon that occaſion, my late brother, Doctor Alexander Ruſſell, was conſulted, by the late Lord Chatham, then Miniſter of State; and the accounts of the diſtemper, received by Government, being vague and contradictory, a propoſal was made to the Doctor, and accepted, to go over to Liſbon in a ſloop of war, in order to aſcertain a matter which threatened much embarraſſment to commerce.

This affair, in all probability, revived the ſubject of Lazarettos, which had been in agitation in Parliament ſome years before; and I found among my brother's papers, the corrected ſcrawl of part of a memoir, which appears to have been drawn up at the deſire of the Miniſter. I am ignorant what was the reſult of this, nor

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I have been led into a longer detail on the ſubject of Lazarettos than was firſt intended; yet have omitted a multitude of minute regu-

nor do I know, for certain, whether the memoir was ever delivered; but I am rather inclined to think the firſt part, regarding Lazarettos, was. The ſecond part, entitled General Directions for Quarantine, I ſuſpect was never finiſhed; at leaſt the ſcrawl contains only a few unconnected paragraphs, and breaks off in the middle of a ſheet. I ſhall produce ſome extracts from theſe papers, by way of ſupplement to my own remarks.

The copy of the letter to the Right Honourable Mr. Pitt, which ſeems to have accompanied the memoir, is dated the 28th of March, 1758.

SIR,

IN obedience to your commands, ſignified to me by Mr. Wood, I have drawn up a few thoughts on quarantine, with the outlines of a plan for properly conducting it. I ſhall be extremely happy if theſe hints ſhould be thought of any uſe in promoting ſo laudable a deſign, &c.

" The preſent method of performing quarantine, in England, for want of proper officers, and the neceſſary regulations, is no ſecurity from infection; though perhaps it is attended with the ſame expence and inconveniency to the merchant, as if it were performed in the moſt effectual manner.

" Our diſtance from ſuſpected places, together with the prohibition of ſhips from thence, without clean bills of health, may hitherto have been the means of our preſervation: but if the contagion ſhould unfortunately break out in any neighbouring country, it is much to be feared that before Lazarettos could be provided, and officers trained to the execution of neceſſary orders, were theſe already ſettled, all precaution might be too late.

" A well regulated Board of Health, with proper Officers and Lazarettos, would obviate theſe inconveniencies, and it is preſumed may be ſo conducted as neither to ſubject trade to unneceſſary obſtructions, nor omit any thing that the public ſafety may require.

" The expence, it is believed, will not be conſiderable; but, by giving the outlines of what occurs as immediately neceſſary, perhaps ſome general eſtimate may be made.

" The principal Lazaretto ſhould be ſituated conveniently for the port of London. The ſize of the building ſuch as to admit of ſeparate warehouſes for ten or twelve ſhips cargoes; with conveniencies for paſſengers, and proper dwellings for the

regulations reſpecting the guardians and other ſervants of quarantine. I have alſo abſtained from enlarging on the abuſes which have prevailed in foreign countries, and which ought carefully to be guarded againſt in forming a new eſtabliſhment; of theſe CHAP. VI.

health officers, all encloſed by a double wall. A plan of this may be eaſily concerted, and ſo laid out, that further additions might be made, if neceſſary.

"An iſland or peninſula would be the moſt eligible ſituation for a Lazaretto. If this cannot conveniently be had, a place ſhould be choſen, where all communication by ſmuggling, or otherwiſe, may be the eaſieſt prevented. The other requiſites are, that ſhips may ride ſafely, within a reaſonable diſtance from the ſhore, be out of the way of veſſels paſſing, and that boats may come conveniently for landing of goods. The air of the place ſhould be healthy, to obviate inconveniencies and alarms that muſt neceſſarily ariſe from ſickneſs at ſuch times. Perhaps ſome ſuch ſituation may be found on the river Medway.

"A prattique houſe ought alſo to be built, with proper offices, and all conveniencies for examining bills of health, and receiving the reports of captains of ſhips, &c. The ſituation of this, if poſſible, ſhould be at no great diſtance from the Lazaretto, ſo as to admit of ſhips ſending their boats thither, without being obliged to go far out of their way. This will facilitate deſpatch, if, at any ſuſpicious time, it ſhould be neceſſary to examine a number of ſhips, where a quarantine may not be thought requiſite: and, if this place is convenient for watering ſuſpected ſhips, it will be an additional advantage. Perhaps Sheerneſs, or ſome where near to it, may be found the moſt convenient for the port of London.

"A prattique houſe at Deal is abſolutely neceſſary, and it is ſubmitted to further conſideration, whether a few Lazarettos, or prattique houſes, ought not to be provided at ſome of the out-ports. Humanity directs one, at leaſt, at St. Helen's Pool, to which place infected ſhips are ordered to repair, by the law, as it now ſtands.

"The only officers required neceſſarily to reſide within the Lazaretto, are one principal, who is to have the direction of the whole, under the Board of Health. One head porter, or gate-keeper; and ſome other aſſiſtants, according to the number of landing places. The guardians, for attending the paſſengers, and porters, for turning and airing the goods, who reſide there only when occaſion requires. To theſe muſt be added, without the walls, watchmen for the night.

"The officers neceſſary for the prattique houſe connected with the Lazaretto, are one, or perhaps two chiefs. One ſurgeon, a clerk, and one or two ſervants. A captain of the port, who may alſo be perfumer, guardians, and boats with boatmen.

"For

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theſe abuſes many have been expoſed, in the French memorials contained in the Traité de la Peſte, and have ſince been remedied at Marſeilles, in 1730[3].

The facts produced, as derived from local obſervation, have been ſtated with ſtrict regard to truth; the concluſions deduced from them may ſometimes be erroneous, but may ſerve to ſuggeſt hints to others, qualified to improve them. Laſtly, the particular caſes, propoſed by way of examples of practice in quarantine, are not purely imaginary. Real facts have been modified and combined, for the purpoſe of illuſtration; but, the caſes, in the main points, have happened, and may happen again. The deciſions on theſe caſes, are ſometimes agreeable to the practice in other countries, ſometimes variations have been made, on account of local differences, or for other reaſons. They are not propoſed as invariable models. Indeed it may be expected that time and experience, in conjunction with the national inventive ſpirit, will introduce material improvements into all the departments of quarantine in England, will contrive ſpeedier methods of purifying infected merchandiſe, and abridge many of the other reſtraints at preſent ſo prejudicial to trade, and ſo vexatious to individuals.

"For ſuch prattique houſes as are only intended for ſhips accidentally touching, one principal officer, and one truſty guardian, with a proper boat and boatmen, are all that are neceſſary.

"The whole of the health officers, throughout the kingdom, ought to be under the direction of a Board of Health in London, conſiſting chiefly of gentlemen who have ſeen ſomething of quarantine abroad, and who would be induced by their public ſpirit to ſerve without ſalaries. To theſe ſhould be added a ſecretary, and a phyſician, to aſſiſt in giving the proper directions, and to viſit the Lazarettos, in caſes of emergency.

[3] Traité de la Peſte, p. 11. 175. 201. See alſo Gaſtaldi, and Howard on Lazarettos.

CHAP. VII.

CHAP. VII.

An abridged account of the ſeveral Quarantine Acts of Parliament, ſince the year 1710—A few remarks on them, and on ſome later orders iſſued from the Privy Council—No proviſion made at the out-ports, for the reception of ſhips liable to quarantine—Unneceſſary delays, ariſing from the quarantine officers not being furniſhed with proviſional inſtructions—The orders relative to airing of goods require reviſal—A Board of Health ſhould be eſtabliſhed.

IN the laſt century, and indeed till ſo late as the year 1710, it would appear that the orders and regulations for preventing the plague being brought into Britain, from foreign parts, and for obliging ſhips to perform a quarantine, were iſſued from the King in Council, by proclamation, without the interference of Parliament. The preamble to the firſt Quarantine Act, in the 9th year of Queen Anne, ſhows that her Majeſty had iſſued ſuch orders, and there can be no doubt that her predeceſſors, on ſimilar occaſions, had done the ſame.

This firſt act, being hurried through both Houſes, received the Royal Aſſent in leſs than eight days from the time the bill was ordered; and it commenced two days after. The plague at that time was raging in ſeveral places on, or near the Baltick Sea, and it probably was found neceſſary to enforce certain regulations, more effectually than could be done without the interpoſition of the Legiſlature. One conſequence of precipitating the bill was, the omiſſion of airing the goods liable to quarantine; the bill being at firſt ingroſſed without any clauſe to that purpoſe; and the clauſe for opening and airing the goods after quarantine, was added, by way of ryder, only the day before the Royal Aſſent was given to the act.

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Conſidering the circumſtances under which the bill was drawn up, it is the leſs to be wondered that it ſhould have been very defective; but by expreſsly empowering the Crown, in caſe of any foreign places being infected, to iſſue ſuch orders for quarantine as might appear neceſſary, it, at leaſt, conferred a ſanction in future on the Royal Proclamations, relating to quarantine, which they had not before; and rendered the breach of orders more immediately an object of legal puniſhment. In the preamble to the act, by which it was repealed in the following reign, it was repreſented as having "been found by experience "defective, and inſufficient for the purpoſes intended; and the "penalties inflicted not adequate to the offences prohibited."

Upon an alarm, occaſioned by the plague at Marſeilles, in the year 1720, the ſubject of quarantines was again introduced into the Houſe of Commons. On the 17th of December, in that year, a quarantine bill was ordered to be prepared by the Attorney and Solicitor General, which was read the 10th of January, and committed to a Committee of the whole Houſe. The Levant Company petitioned againſt it; but it paſſed the 21ſt of January, and received the Royal Aſſent the 25th. The act was to commence the 10th of February, and to continue in force three years, or till the end of the then next Seſſion of Parliament.

More pains and deliberation had been employed in preparing this act, than the former; and it conſequently came out not only enlarged, but much improved. The act of Queen Anne was repealed; and certain clauſes being inſerted, for preventing the infection from ſpreading, that circumſtance was expreſſed in the title of the new act[1].

[1] The title of Queen Anne's Act was, "To oblige ſhips coming from places infected more effectually to perform their quarantine."

The title of the preſent act was, "For repealing an act (Queen Anne's Act) and for the better preventing the plague being brought from foreign parts into Great Britain or Ireland, or the iſles of Guernſey, &c. &c. and to hinder the ſpreading of infection."

The

The clauſes more immediately calculated for hindering the infection from ſpreading, ſuppoſe the plague exiſting in the country. They will be more particularly adverted to, in the following book: but in what regards the regulation of ſhips coming from infected places, moſt of the clauſes, with very little variation, have been tranſcribed in the ſeveral quarantine acts which have paſſed ſince, and they are now in force. The continuance of this act, was, by a clauſe added by the Lords, to a ſubſequent act, limited to the 25th of March, 1723.

The plague of Marſeilles gave occaſion to two other acts, in the next Seſſion of Parliament. The one, "to enable his Majeſty effectually to prohibit commerce, for the ſpace of one year, with any country that is, or ſhall be, infected with the plague[z]." The other, "to prevent the clandeſtine running of goods, and the danger of infection thereby; and to prevent ſhips breaking their quarantine."

The firſt received the Royal Aſſent the 12th of February, 1721-2; the ſecond, not till the 7th of March, having encountered various obſtructions in its progreſs, on account of the clauſes reſpecting ſmuggling.

It may be remarked, that in July preceding, a bill to prevent the plague being brought in by ſmuggling, had paſſed in the Houſe of Commons, but was rejected by the Lords. At the beginning of the next ſeſſion, the danger to be apprehended in times of infection, from the practice of ſmuggling, was mentioned in his Majeſty's Speech; and a new bill being brought in, the 15th of December, the act received the Royal Aſſent the 7th of March.

[z] And for ſhortening the continuance of an act paſſed in the 7th year of his Majeſty (The Quarantine Act).

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Power had been given before, by the Quarantine Act, in times of infection, whether in Britain, Ireland, the iſles of Guernſey, &c. or France, Spain, Portugal, or the Low Countries, to prohibit veſſels of leſs burthen than 20 tons, from ſailing out of any port of Great Britain, &c. except under certain conditions. By the preſent act, foreign ſpirits, &c. were not to be imported in veſſels of leſs than 40 tons; and ſhips departing, without licence, from places appointed for quarantine, are forfeited, and the commanders forfeit 200l.

All theſe acts of the 7th and 8th of George the Firſt, being temporary, terminated in two or three years; and upon the expiration of the Quarantine Act, in March, 1723, that of Queen Anne, of courſe revived, and continues to be ſtill in force.

Matters remained in this ſtate till the firſt year of George the Second, when the plague being in foreign parts, an act paſſed, exactly under the ſame title as the former, except ſo far as regards the repeal of Queen Anne's Act. Leave was given to bring in the bill on the 9th of May, 1728. On the 10th it was read a ſecond time, and committed; it paſſed the 24th, and, being agreed to by the Lords, without amendments, it received the Royal Sanction the 28th.

The moſt material clauſes, relative to the quarantine for ſhips, were nearly verbatim the ſame with thoſe of the 7th of George the Firſt. Some however were omitted; and the power of prohibiting commerce, for the ſpace of one year, which had been the ſubject of a ſeparate act, in 1721, was now inſerted in the preſent; and power given to the King, to prohibit (by proclamation under the great ſeal) commerce between his ſubjects and places infected; alſo to prohibit perſons coming from ſuch places entering his dominions, under a penalty of 500l. The exporter of goods to forfeit double their value; and ſhips or perſons coming from infected places, contrary to the proclamation, the perſons are

are deemed guilty of felony; and the ſhips and goods are forfeited. The procurer of ſuch goods to be imported, forfeits treble their value.

Among the principal clauſes of the former Quarantine Act now omitted, beſides thoſe which had been repealed in 1721, were the 4th, empowering his Majeſty, in Council, in times of infection in Britain, to make orders for the regulations of quarantine, &c.—And the 13th, giving power to order ſhips coming from infected places, or laden with goods from ſuch places, or having on board any infected perſon, to be burnt.

The clauſes reſpecting the hindering the infection from ſpreading, will come under conſideration hereafter. They are chiefly thoſe concerning Lazarettos; the reſtraint of ſmall boats under 20 tons; and the compelling perſons, liable to quarantine, to compliance with orders.

It is worth obſerving, that in this act, as well as in that of George the Firſt, the order for opening and airing goods, *after the quarantine of the ſhip and crew*, is continued. A regulation productive of very unneceſſary delay, not to mention other inconveniencies, which has been corrected in the ſequel.

This act, like the others made in 1720 and 1721, being only temporary, was permitted to expire in 1731; but in 1733, a bill was brought in for reviving it; the plague having again made its appearance in ſome foreign places. The bill was ordered the 4th of June, preſented, read twice, and committed the ſame day; reported and ordered to be engroſſed the day following, and paſſed the 6th. No amendments being made by the Lords, it received the Royal Aſſent on the 13th. The act to continue in force from the 2d of June, 1733, for two years, and from thence to the then next Seſſion of Parliament[3].

[3] The title is, An Act for reviving ſo much of the Act made in the Firſt Year

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It may be remarked, that from the year 1735 to the year 1753, the act of Qeen Anne, was the ſole quarantine law remaining in force, in Britain. In this interval, happened the plague at Meſſina, in 1743, and his Majeſty being abroad, the Lords of the Regency ordered all ſhips from the Mediterranean, bound to the river Thames, to perform their quarantine in Standgate Creek only[4].

In the year 1752, quarantines became again a ſubject of parliamentary diſcuſſion; and in the following year, on the 22d of January, Lord Barrington, and five other members, were appointed to prepare a quarantine bill, which was accordingly preſented the 8th of February, and ordered to be printed. On the 20th the bill was read a ſecond time. The acts of the 7th and 8th of George the Firſt were, upon motion, read, and the bill was committed on a diviſion, 92 to 49. After being four or five days in a Committee of the whole Houſe, the bill, with amendments, was reported the 12th of March. The next day, after further conſideration and amendments, it was ordered to be engroſſed, and on the 16th it paſſed. The Lords, on the 4th of April, agreed to the bill, with ſome amendments, which, on the 10th, being approved by the Commons, the Royal Aſſent was given on the 17th[5].

of his Majeſty's Reign, entitled, &c.—as relates to the performing quarantine, and the preventing the ſpreading of infection, and to enable his Majeſty to prohibit commerce with any country or place infected with the plague, for a certain time therein limited.

[4] In September, 1743, the clerk of the Scipio fire-ſhip was committed to the Marſhalſea priſon (by a ſpecial warrant from the Lords of the Admiralty) for ſix months, purſuant to a ſentence of a court-martial, for not performing quarantine agreeably to the direction of the Lords of the Regency. The boatſwain of the ſame ſhip was tried at the ſame court-martial, and condemned to die, for leaving the ſhip, and not performing quarantine. The leaving the ſhip might perhaps be puniſhable by death, but the not performing quarantine was certainly not a capital crime by Queen Anne's Act.

[5] An act to oblige ſhips more effectually to perform their quarantine; and for the better preventing the plague being brought from foreign parts into Great Britain or Ireland, or the iſles of Guernſey, &c. &c.

It had been propoſed in the Committee to limit the continuance of the act to five years, but the queſtion being put, paſt in the negative. The act commenced the 1ſt of March, 1754; and its continuance was left indefinite.

While the bill was yet depending in Parliament, another was brought into the Houſe of Commons, on the 14th of February, for enlarging and regulating the trade into the Levant ſeas; to which, on the 10th of April, when the bill was reported, were added two clauſes reſpecting quarantine. The one, "that all "rules, orders, and regulations, made for preventing infection, "ſhall be, and remain in full force and virtue, as if this act "had never paſſed." The other, "that no goods or merchan-"diſes liable to retain the infection of the plague, and coming "from the Levant, without a clean bill of health, ſhall be landed "in any part of Great Britain, &c. &c. unleſs it ſhall appear to "the ſatisfaction of his Majeſty, his heirs, or ſucceſſors, or of "his or their Privy Council, that the ſaid goods or merchandiſes "have been ſufficiently opened and aired in the Lazaretto of "Malta, Ancona, Venice, Meſſina, Leghorn, Genoa, and Mar-"ſeilles, or one of them."

This Regulating Act received the Royal Aſſent the 15th of May, a month after the Quarantine Act, and was to take place the 24th of June, in the year following.

The orders alluded to for preventing infection were, I ſuppoſe, thoſe made by the Levant Company; and the obliging ſhips to perform their quarantine in one of the foreign Lazarettos, was only a temporary expedient, till the determination reſpecting the building of Lazarettos, a ſcheme then in contemplation, ſhould be known.

Quarantines had never before undergone ſuch a deliberate diſcuſſion in Parliament, as at this period. No circumſtances of urgent

BOOK V. urgent neceſſity, as on former occaſions, required the act to be paſſed haſtily; full time was allowed for enquiry, and the law did not take place till twelve months after it was enacted.

Moſt of the clauſes of the former acts, having been literally adopted in the new Quarantine Act, may be ſaid to have received the ſanction of Parliament four different times; that is, in 1720, 1728, 1733, and 1753. The new act, however, made conſiderable improvements; in ſome inſtances, by the clauſes being more correctly expreſſed; in others, by important additions.

Among the additional clauſes, the principal was that by which ſhips, on which the plague may appear, being to the northward of Cape Finiſterre, were to proceed to the harbour of New Grimſby. But, in conſequence of a petition from the inhabitants of the Scilly Iſlands, the place for infected ſhips was changed, by a ſubſequent act, in 1756, to St. Helen's Pool[6].

A ſecond additional clauſe in the new act was, that the maſter of a veſſel performing quarantine, ſhould deliver to the officer appointed, the bill of health and manifeſt of the Britiſh Conſul, with the log-book and journal, under penalty of 500 l.

A third clauſe, not ſo clearly expreſſed in former acts, was, in reſpect to all perſons, liable to perform quarantine, whether in ſhips, Lazarettos, or elſewhere. That they ſhall be ſubject, during quarantine, to ſuch orders as they receive from the proper officers; who are empowered to enforce their orders, and, in caſe of neceſſity, to call in others to their aſſiſtance; and all perſons ſo called in are required to aſſiſt accordingly.

[6] Anno 29 George the Second, An Act to repeal the Clauſe of an Act, &c. whereby the ſtationing of ſhips infected with the plague to the northward of Cape Finiſterre, is confined to the harbour of New Grimſby, and removable to no other place; and for appointing a more ſafe and commodious place.

A fourth

A fourth clauſe, not comprehended in the former acts was, "That "if any quarantine officer ſhall embezzle, or ſhall willingly da- "mage, any goods performing quarantine under his direction, "he ſhall be liable to pay treble damages, and full coſts of ſuit." CHAP. VII.

A fifth alteration from the former acts, relating to ſhips liable to quarantine, was the leaving out, "all ſhips coming from infected "places, or from any place, the inhabitants whereof are known "to trade or correſpond with any country or place actually in- "fected"—and retaining only "all ſhips, perſons, and goods "coming from places from whence his Majeſty, in Council, may "judge it probable that the infection may be brought."

A ſixth variation from the former acts, was in the order for air- ing goods, in leaving out the words *after quarantine performed*, and expreſſing the order more briefly, "all goods, wares, and mer- "chandiſes, liable to quarantine, ſhall be opened and aired in ſuch "places, or for ſuch time, or in ſuch manner as ſhall be directed "by his Majeſty."

A ſeventh alteration, was that regarding Lazarettos, by which the power of ordering them, lodged formerly with the King alone, is placed in his Majeſty, *by and with the conſent of Parliament*; and diſputes that might ariſe concerning the lands to be appro- priated to ſuch purpoſes, are to be ultimately ſettled by a jury, inſtead of the juſtices.

Laſtly, in the title, as well as in the preamble of the act, the words, *and for preventing the ſpreading of infection* are entirely left out. It may be conſidered alſo as an innovation, that the noti- fication of orders for quarantine, may either be by proclamation, as before, or publiſhed in the London Gazette.

In tracing the progreſs of the quarantine laws, a remark for- cibly offers itſelf, that till the year 1753, they never came under

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the conſideration of Parliament, but when preſſed upon it, by apprehenſions raiſed by the plague on the Continent, or in other foreign places. The neceſſity of expediting the acts, hardly admitted time for due deliberation. They were all temporary; and being allowed to expire, were occaſionally revived, for the ſame urgent reaſons for which they had at firſt been framed; and conſequently were revived without correction or improvement.

This was not the caſe with the preſent Quarantine Act of George the Second, which is now in force; and which has hitherto required no amendment, except in changing the ſtation for infected ſhips, from New Grimſby to St. Helen's Pool; and in an explanation of the clauſe relative to Lazarettos, by an act in the 12th year of his preſent Majeſty[7].

The few following obſervations on the quarantine laws, are offered with the utmoſt deference.

By the amended ſecond clauſe of the ſtatute 26th of George the Second, every infected veſſel, being to the northward of Cape Finiſterre, ſhall proceed to St. Helen's Pool; where the captain ſhall make known his caſe to ſome officer of the cuſtoms there, who, with all poſſible expedition, ſhall tranſmit the intelligence to one of the principal ſecretaries of ſtate; in order that meaſures may be taken for the comfort and ſupport of the crew, and ſuch precautions uſed, to prevent the ſpreading of the infection, as the caſe may require. The veſſel to remain there till his Majeſty's pleaſure be known; and, in the mean while, the maſter and crew not to go out of the ſhip, under pain of death. Such veſſels as cannot make the harbour of St. Helen's Pool, ſhall not preſume to enter any port, but ſhall remain in ſome open road (under the ſame penalties) till orders arrive from the King in Council.

[7] An act to explain and amend ſo much of an act made in the 26th year of the reign of his late Majeſty King George the Second, as relates to the eſtabliſhment of Lazarettos.

It

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It is certainly highly proper that there ſhould be a determined place or places, for the reception of veſſels ſo unhappily circumſtanced; but the ſhutting up the ſound and infected together, in the ſame veſſel, till orders be received from his Majeſty, is unintentionally rigorous, and would ſeem to be no leſs impolitic, than it is unneceſſary. A delay of ſix or ſeven days falls heavy on perſons in ſight of ſhore, in hourly dread of contracting a mortal diſtemper. Penal laws will prove a feeble reſtraint on deſperate men flying from death; and, in the preſent caſe, it is of more importance to ſociety, to leſſen the temptation to infractions of quarantine, than to puniſh them when committed.

But beſides the difficulty of enforcing the regulations of quarantine, under ſuch circumſtances, the delay would ſeem to be wholly unneceſſary; becauſe no orders or directions, in the power of the Privy Council to iſſue, on ſuch an emergency, can be imagined, which might not be more maturely concerted before-hand; and which, by being lodged with the cuſtom-houſe officer, or other perſons appointed for that purpoſe, would enable them to act effectually at once, at leaſt ſo far as to ſeparate the infected from the ſound: a meaſure urgently requiſite, for preventing the infection from ſpreading among the crew, and which would diſpoſe them more to compliance with regulations, than the threatenings of the law.

Similar reaſons render it alſo deſirable that the act, inſtead of open roads, had ſpecified one or more ſtations for ſuch veſſels as cannot make the harbour of St. Helen's Pool. The perſons reſiding there, entruſted with the ſuperintendence of quarantine, ſhould alſo have proviſional orders from the Council, enabling them to act immediately, in relieving the crew. The ſtations ſhould be ſelected upon ſurveys, and with the aſſiſtance of perſons converſant in ſea affairs; for the harbour of New Grimſby, appointed at firſt for the reception of infected veſſels, was ſoon diſcovered to be an improper place.

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By the third clauſe of the ſtatute the captain of the ſhip is obliged to anſwer truly to certain interrogatories, under pain of a forfeit of 200l. for each offence; and in caſe he ſhould conceal his having come from a place viſited by the plague, or the having any perſon on board actually infected, he ſhall be judged guilty of felony, and ſhall ſuffer death without benefit of clergy.

The interrogatories ſpecified, for the captain's examination, are well calculated for the purpoſe intended. Another perhaps might be added, viz. Whether any parcel, package, &c. had been delivered to any other veſſel on the paſſage, or any parcel, &c. been received from ſuch veſſel. Communication of perſons is provided for, but parcels may be interchanged without perſons going on board of each others ſhips, or without any clandeſtine intention.

By the 15th clauſe, if the commander of a ſhip, liable to perform quarantine, having notice thereof, ſhall himſelf quit the ſhip, or knowingly ſuffer any one elſe to quit it, by going on ſhore, or on board any other ſhip; or if he does not repair to the place appointed for the ſhip to perform quarantine, in due time after notice, he forfeits 500l. Perſons quitting the veſſel, to be obliged by force to return on board, to ſuffer ſix months impriſonment, and to forfeit 200l.

By the 8th clauſe, perſons obliged to perform quarantine, wilfully refuſing, or attempting to eſcape, may be compelled, by ſuch force as the caſe ſhall require, by the perſons appointed to ſee quarantine performed, to return to the houſe, Lazaretto, or other place appointed for quarantine—and perſons refuſing or neglecting to go into the Lazaretto, and alſo every perſon actually eſcaping, ſhall be adjudged guilty of felony.

The danger to be apprehended from quitting a ſhip liable to quarantine, or eſcaping from a Lazaretto, would ſeem to be the ſame;

ſame; but the penalty incurred is very different. In the one caſe, impriſonment, and pecuniary mulcts; in the other, death without benefit of clergy. To prevent the completion of this crime, which is the chief object in both caſes, the watchmen, in foreign countries, are empowered, where they cannot otherwiſe prevent an eſcape, to fire upon, or kill the fugitive.

By the 11th clauſe, any officer of quarantine who ſhall embezzle, or willingly damage any goods performing quarantine uder his direction, ſhall pay treble damages, and full coſts.

Embezzlement, though committed under truſt, as it tends directly to the ſecreting, and circulating infected goods, would appear to be too ſlightly puniſhed.

The Quarantine Act, marking the great lines only, leaves the detail and execution to his Majeſty in Council; which, different from the practice in moſt other countries, conſtitutes the only Board of Health in Britain. But, conſidering the multiplicity of affairs claiming the time and attention of the Privy Council, and the important offices held by many of the Members, it can hardly be expected that that Board ſhould find leiſure ſufficient for entering into a variety of minute enquiries, abſolutely neceſſary to the eſtabliſhment of permanent regulations, and for framing proviſional directions for a number of emergencies, incident to the ſuperintendence of quarantine. Hence it is not to be wondered if powers, which the Council ought alone to exerciſe, be too readily delegated to others; if orders be ſometimes iſſued upon imperfect information, and unſteadily altered or revoked, without any fixed rule of deciſion; and laſtly, if frequent delays happen unneceſſarily, from an omiſſion of making due proviſion for ſuch exigencies as may be expected, in the ordinary courſe of things. That theſe allegations are not altogether without foundation, I ſhall endeavour to ſhow by a few examples.

In

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In the year 1770, upon account of the plague raging in Walachia, Podolia, and other parts of Poland, an order was publiſhed, the 5th of October, obliging all veſſels, perſons, and goods, coming from Dantzick, or any other place in Royal and Ducal Pruſſia, or Pomerania, to perform a quarantine of forty days. Ships bound to the rivers of Thames and Medway, not having the infection on board, were to perform their quarantine in Standgate Creek, but, in reſpect to veſſels bound to other ports, the officers of the cuſtoms in the reſpective ports were empowered and required to appoint proper places; and, in the iſles of Jerſey, &c. the ſame powers were given to the governors of thoſe iſles.

This delegation to the officers of the cuſtoms, muſt have been owing to the Council not being as yet ſufficiently acquainted with proper places for veſſels to perform quarantine, in Great Britain, though twenty-ſeven years had elapſed from the time of paſſing the Quarantine Act; and, from leaving it diſcretionary to the officers of the cuſtoms to appoint the ſtations, it is evident no arrangements had been made, by the Council, for the reception of veſſels at the ſeveral ſtations; they were to repair thither and wait for further orders.

At what period the officers of the cuſtoms were exonerated of this duty, and the Council took upon itſelf to appoint the reſpective ſtations, I do not know; but in an order, iſſued the 15th of December, 1780, on account of the plague ſpreading in many places of the Ukraine and Volhinia, no leſs than ſeven ſtations in England, four in Scotland, and two in Jerſey and Guernſey, were appointed ſpecially, for the performance of quarantine.

If ſuch a number of places in Britain muſt unavoidably be allotted for this purpoſe, ſome arrangements ought undoubtedly to be previouſly made there for the reception of veſſels; and a more efficient guard, than a few inferior cuſtom-houſe officers, ſhould be provided, to ſee the quarantine duly performed. If this be not done,

done, the moſt effectual means of defence are certainly not employed, and the ſeveral ſtations for quarantine may be conſidered as ſo many avenues by which infection may find its way into the iſland. CHAP. VII.

Suppoſing for example, what certainly may be ſuppoſed of any veſſel liable to perform quarantine, that in airing the cargoes of ſome of thoſe from the Baltic, in any of the diſtant ſtations, the infection ſhould diſcover itſelf among the crew working on the goods. What is to be done? Is the veſſel to wait for orders from the Council, or is ſhe to be ordered at once from a remote creek in Scotland, to proceed (with the infection ſpreading on board) to St. Helen's Pool, agreeably to the ſtatute? If ordered to go to St. Helen's Pool, are the cuſtom-houſe officers, in the out-ports, in a condition to compel obedience to their order? It is true they are empowered, by the 9th clauſe of the ſtatute, to call others to their aſſiſtance; and all perſons ſo called are required to aſſiſt; and by the orders of his Majeſty, in Council, commanders of ſhips of war, of forts, and garriſons lying near the ſea-coaſts, juſtices of the peace, mayors, ſheriffs, bailiffs, chief magiſtrates, conſtables, headboroughs, tything-men, and all other officers and miniſters of juſtice, are required to be aiding and aſſiſting the officers of the cuſtoms. Theſe precautions, for enforcing the due performance of quarantine, are no doubt wiſely concerted; in ſome ſituations they would fully anſwer the purpoſe; and, in the caſe now ſuppoſed, where there is no ſhip of war to convoy the infected veſſel to her allotted ſtation, would enable the officers to defend their own coaſt. But what may not be apprehended in other maritime places, unalarmed and defenceleſs, from a wretched crew driven to deſperation: is it not likely they would attempt an eſcape on ſhore, at all hazards?

Further, were the maſter of the veſſel to ſubmit reſignedly, and make the beſt of his way to St. Helen's Pool, on his arrival there, would he find a place ready to receive his ſick? Or muſt

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he ſee the reſt of his crew periſh in waiting for the orders of the Council. The ſtatute is ſilent reſpecting the ſeparation of the ſick; and the order of 1780, makes no proviſion whatever for ſhips, on board of which the infection may diſcover itſelf during the performance of quarantine, as if no ſuch accident could happen.

If it be ſaid the immediate wants of the veſſel will no doubt be ſupplied, and the Council will, with all poſſible ſpeed, deſpatch the requiſite orders for her further relief; the remark made before on the ſecond clauſe of the ſtatute may be repeated, namely, that the Council can frame no orders, in ſuch a caſe, which might not have been framed long before, and depoſited proviſionally, with the officer of quarantine, who would thus be empowered to provide immediately for the infected ſick: a circumſtance material for the preſervation of the crew, and for ſecuring a ſtricter obſervance of the quarantine.

The total ſilence of the order of 1780, reſpecting ſuch a caſe as was above ſuppoſed, renders it probable that neither in any of the diſtant ſtations of quarantine, nor even at St. Helen's Pool, preparatory arrangements had been made at that time; if there had, ſome reference would have been made to them. If there were none, a dangerous delay is inevitable; and, in the execution of whatever orders the Council might iſſue, the cuſtom-houſe officers would find themſelves embarraſſed, from the want of previous diſpoſitions to facilitate deſpatch.

That the officers of the cuſtom-houſe are furniſhed with no inſtructions for their conduct, in matters of quarantine, beſides what are contained in the ſtatute 26 George the Second, or in public orders, iſſued occaſionally, from the Privy Council, may be ſuſpected from what happened ſo lately as in 1783.

Towards the end of July, in that year, information being received of the plague having appeared on the frontiers of Poland,

all ſhips from Dantzick, or any port or place in Royal or Ducal Pruſſia, or Pomerania, were ordered to perform a quarantine of forty days. It had not occurred to the Council that, amongſt the veſſels from thoſe parts, there might happen to be ſome laden with grain only, otherwiſe it may be ſuppoſed proviſional diſtinction would have been made reſpecting ſuch cargoes, and inſtructions given to the officers of the cuſtoms how to proceed; and this the rather, becauſe grain is entirely omitted, both in the orders of 1770 and 1780, though wine and oil (which like grain are reckoned not ſuſceptible of infection) are particularly mentioned.

Five or ſix days after the publication of the above order, a memorial was preſented to the Lord Provoſt of Edinburgh, ſetting forth the ſtate of the city to be then ſuch, that there was imminent danger of a famine, in conſequence of the late order of the Privy Council; there not being grain then in the granaries ſufficient for three weeks conſumption. This memorial was preſented the 31ſt of July; and, three days after, at a general meeting of the magiſtrates, and others aſſembled on purpoſe, after conſulting two eminent phyſicians, who gave it as their opinion, that there was very little danger of the peſtilence being conveyed in grain, it was determined to tranſmit the memorial, and opinion of the phyſicians, to Lord North, to be by him preſented to the Privy Council; together with a letter from the Lord Provoſt, praying that ſuch relaxation might be allowed, in the diſcharge of all cargoes of foreign grain, as the diſtreſſed ſituation of the country ſo loudly called for. In conſequence of this application, the Privy Council, going beyond the prayer of the petition, iſſued an order, on the 9th of Auguſt, that the reſtraint of quarantine be taken off all ſhips and veſſels already arrived, or that may hereafter arrive from Dantzick, &c. laden ſolely with grain; and that they may be permitted to diſcharge their reſpective ladings, without unpacking, opening, and airing, and without performing any quarantine; provided the maſter of the veſſel makes oath,

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that the crew are free from all infection, and that they have not had communication with any ſhip or veſſel coming from any infected place.

It is obvious here, that the omiſſion of grain, among the other articles, which might poſſibly be imported from ſuſpected places, was a material defect in the regulations for quarantine; for had proviſion been made reſpecting ſuch cargoes, there would have been no occaſion for a haſty conſultation of phyſicians; for a delay of ſuch alarming tendency; or for praying a relaxation of eſtabliſhed rules, upon a plea of the preſſing diſtreſs of the country. The quarantine officers would have found themſelves in a ſituation to act immediately; and, without any relaxation of eſtabliſhed regulations, might have remedied the diſtreſs of the country, in half the time inevitably taken up in conſultation and petitioning. The memorial to the Lord Provoſt was preſented the 31ſt of July, and the expreſs, with orders for taking the quarantine off the corn ſhips, did not arrive at Edinburgh till the 13th of Auguſt, ſo that before the veſſels from the ſtations where they lay in quarantine could arrive to diſcharge at Leith, a whole fortnight was loſt.

The tenour of the indulgence granted by the Council, carries marks of the hurry in which the order was iſſued; and ſhows, at the ſame time, the propriety of concerting regulations when there is leiſure for deliberation, and not under the urgency of inſtant danger.

In the order publiſhed only twenty days before, wine and oil in cheſts, thread ſtockings, all goods packed with ſtraw and cotton, mats and matting, and ſails, are enumerated among the goods more eſpecially liable to retain infection, and which, on that account, are, by the former orders, to which the preſent refer, ſubject to a longer airing. This diſtinction and reſtraint were ſtill continued in regard to all veſſels, except thoſe laden with grain,

grain, which without any viſible neceſſity were permitted to diſcharge their cargoes, without any precaution whatever; as "to "the *bags* or *ſacks*, in which the ſaid corn is contained, or mats "made uſe of ſolely for the purpoſe of dunnage"—As if the ſacks, bags, mats, and ſails, in ſhips laden with grain, were leſs to be ſuſpected than the ſacks, mats, and ſails employed in other ſhips. CHAP. VII.

A deviation from orders of ſo recent a date, as well as from rules eſtabliſhed in other countries, may, without offence, be aſcribed in ſome meaſure to want of information, and hurry of buſineſs. The grain might have been ſtarted into lighters, to be repacked in freſh ſacks, as uſually practiſed elſewhere; and this might have been done the ſecond or third day after the ſhip's arrival, or as ſoon as the ſtate of the crew and cargo could have been properly aſcertained. But no viſible reaſon appears why the ſacks, mats, &c. as well as the crew, ſhould be exempt from reſtraint whilſt a quarantine was rigorouſly enforced upon all other veſſels. The declaration of the maſter, that he had loſt none of the crew on the voyage; that he had had no communication with ſuſpected ſhips; that he had no enumerated goods on board; and that the crew, upon muſtering by the proper officer, were found all in health; were favourable circumſtances, but far from ſufficient to plead as an exemption from a certain quarantine. The urgent neceſſity of the country required the grain only; the ſhip and crew had nothing to do with the apprehended dearth, and ought to have remained ſome time under reſtraint. It is more than probable that the Council, deliberating at more leiſure, would have perceived the field left open for illicit trade, and irregularities of every kind, in admitting ſuch diſtinctions, reſpecting veſſels from ſuſpected ports performing quarantine in the ſame place: the temptation to ſmuggle ſmall parcels, if not other more bulky ſuſceptible goods, would be too powerful for the vigilance of the guards of quarantine.

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The year 1770 affords two more inſtances of what has the appearance of precipitation, in the determinations of the Council.

An order was iſſued the 19th of October, that rags and cotton wool, being goods more eſpecially liable to retain infection, imported in any veſſel not obliged to perform quarantine, ſhould be put on board a hoy, and ſent to perform a quarantine of a fortnight in Standgate Creek, if the veſſel was bound for the Thames; but if bound for other ports, the rags and wool were to be taken out before the veſſel could unload, to be put on board ſome proper veſſel to be unpacked, opened, and aired, in like manner as on board the hulk at Standgate Creek. The plague raging at this time, at Conſtantinople, and in Poland, the quarantine was extended to all veſſels from the Mediterranean, Dantzick, Royal and Ducal Pruſſia, &c.

If danger was really to be apprehended from rags and wool, ſurely the permitting their importation in veſſels not liable to quarantine, upon condition of their being taken out to be purified, was a ſingular method of preventing infection; and, if once admitted into practice, would put an end to all ſecurity from quarantines.

A diſcovery was made ſoon after, that occaſioned the above order to be revoked; for, upon repreſentation being made, that rags imported were frequently ſtowed in different parts of the ſhips, among other goods ſuſceptible of infection, it was ordered that all veſſels whatſoever, having rags and wool on board, ſhould perform a quarantine of forty days.

But the ſame cauſes which had led to the firſt error produced a ſecond, for within a fortnight, upon a ſecond repreſentation, ſtating that cotton, wool, and rags were commodities brought from America and the Weſt Indies, all ſhips from thoſe places, with cotton, wool, and rags on board (the produce of thoſe countries) were exempted from quarantine.

A board,

A board, whoſe only buſineſs had been the regulating of quarantines, would in all probability have proceeded upon better information, would have been better prepared for the various caſes that preſent, and would not have iſſued ſuch fluctuating orders. CHAP. VII.

The other inſtance, in the year 1770, reſpects Hamburgh and Bremen, to which the quarantine then ſubſiſting, upon all ſhips, perſons, and goods, coming from Dantzick, Royal and Ducal Pruſſia, &c. was extended on the 1ſt of November; on account of the plague raging in divers parts of Poland, from whence, it was apprehended, the infection might be brought in ſundry commodities, the produce of thoſe places, to Hamburgh and Bremen, and thence imported into Britain. On the 20th the Swediſh Envoy informed the Secretary of State, that no ſhips, or travellers, would be admitted into the ports or frontiers of Sweden, without proper bills of health. In conſequence of which, notice was given to apply for ſuch patents, to the Commiſſioners of the Cuſtoms, and to the principal officers of the cuſtoms in the out-ports.

This application made by the Envoy, ſhowed that the alarm of danger, from Poland, ſtill ſubſiſted on the Continent. Nevertheleſs, on the 30th of November, upon a petition of ſeveral merchants of London, trading to Hamburgh and Bremen, ſetting forth, "that there doth not appear to be the leaſt ſymptoms of an epidemic diſtemper within ſeveral hundred miles of either of thoſe places; that the linens imported *by the petitioners* are all manufactured in different parts of Germany, where there are not the leaſt ſigns of infection; and as all the Princes of the Empire, through whoſe territories theſe linens muſt paſs, have taken all poſſible precautions to cut off the communication with infected places; therefore praying that all ſhips from Hamburgh and Bremen, that have no rags or cotton wool on board, be not obliged to perform quarantine."

Agree-

BOOK V. Agreeably to this requeſt, the quarantine was immediately taken off.

It may be remarked here, that the Council muſt have proceeded upon very imperfect information, if the circumſtances relative to the places where the linens brought from Hamburgh are manufactured, the precautions employed by the German Princes, &c. ſet forth in the petition, were not known to them before; and the grounds of apprehenſion from that quarter, muſt have been ſlightly founded, if they were ſo readily removed by this repreſentation of the Hamburgh merchants.

The preamble to the order for quarantine ran thus: "It being "judged probable that the infection now raging in divers parts "of Poland, may be brought into this kingdom by means of "ſundry *commodities*, the *produce* of *thoſe places*, exported from "Hamburgh and Bremen." There was no ſuppoſition here of the plague exiſting within two or three hundred miles of Hamburgh, but that merchandiſe was brought to that city, from divers parts of Poland, where the plague then exiſted, and from thence might afterwards be exported to England. If this was not a fact, the Council proceeded upon miſinformation, when it extended the quarantine to Hamburgh and Bremen; if it was a fact, the ſame reaſons as before, for continuing it, ſtill ſubſiſted. At leaſt till further advices were received, from the ſame authority upon which the quarantine had been laid on; for as to the precautions of the German Princes againſt infection, the Privy Council cannot well be ſuppoſed to have been ignorant of them, no more than it can be ſuppoſed to have learned from the petition, that the infected places of Poland were ſeveral hundred miles diſtant from Hamburgh.

The petitioners took upon them to aſſert two facts, of which one, at leaſt, was out of the line of their correſpondence, and had no claim to be admitted upon their ſole authority. They

aſſerted that not the leaſt ſymptom of any epidemic diſtemper exiſted within ſeveral hundred miles of Hamburgh. A fact of this nature required ſome other ſupport than ſimple aſſertion, and indeed preſuppoſed a kind of enquiry, which it was very improbable had ever been made by the merchants, and which was not ſo much as pretended, in the petition. The other aſſertion, that linens imported by the petitioners were manufactured in different places of Germany, was more within their reach, and had a right to more credit. But it did not follow, from that declaration, that no goods were brought to Hamburgh and Bremen from the infected places in Poland, and from thoſe places might not be imported into England by other merchants than the petitioners. At any rate they had no colour of pretence for going beyond what they themſelves could anſwer for, and requeſting the quarantine might be taken off all ſhips from Hamburgh and Bremen, ſuch excepted as had rags and cotton on board. Strange as this requeſt was, the Council, as if till then entirely ignorant of the facts ſet forth in the petition, immediately granted it, with a reſerve only of the moſt ſlender of all ſecurities for the public ſafety, namely, the declaration on oath of the maſters of ſhips, many of whom are in the habit of conſidering cuſtom-houſe officers as infidels not morally entitled to truth.

In both the inſtances of 1770 and 1783, the Council ſeem to have adhered to one general rule, either to continue the quarantine for forty days, or at once to take it off altogether. In the caſe of the Hamburgh petition, the quarantine of particular veſſels, under certain well-atteſted circumſtances, might have been abridged: but a general exemption of all ſhips, in compliance with a petition of individuals, ſuppoſing (what muſt be ſuppoſed) that the Council had ſufficient reaſons at firſt for extending the quarantine to Hamburgh and Bremen, was unneceſſary, and inconſiſtent. In the caſe of the Edinburgh petition, the grain, conſiſtently with the uſual rules of quarantine, might have

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have been ſtarted and delivered; but the veſſel and crew ſhould have been obliged to perform a ſhort quarantine.

The caſes now produced are intended as inſtances of haſty deciſions of the Council, and are ſuppoſed to be owing to the hurry in which orders are expedited upon preſſing emergencies. The directions relative to the mode of purifying merchandiſe liable to retain infection, were probably conſtructed more deliberately; but, I conceive, they alſo require reviſal.

By the 12th clauſe of the ſtatute 26 George II. "all goods, ſpe-"cified in any order concerning quarantine, imported;" and by the 15th clauſe, "all goods, liable to quarantine, ſhall be opened "and aired, in ſuch place and manner as ſhall be directed in "ſuch orders."

By the order of Council of October 5th, 1770; "all goods "liable to quarantine, ſhall be unpacked and aired, and ſo re-"main a week; other than hemp and flax; paper or books; ſilk "raw, thrown, or worked; linen, cotton wool, cotton yarn, or "manufactured; wool, raw, or anywiſe wrought; feathers, gro-"gram, or mohair yarn, human hair, goats hair, Carmenia "wool, carpets, camblets, burdetts, or other manufactures of "ſilk and cotton, kid ſkins, and ſkins in the wool or hair, ſpunges, "wine and oil in cheſts, thread ſtockings, goods packed "with ſtraw or cotton, ſtraw hats and bruſhes, matting, and ar-"tificial flowers; which goods and merchandiſes ſo enumerated, "are to be opened, unpacked, and aired, and ſo remain for the "ſpace of a fortnight."

The order of Council of the 13th December, 1780, enume-rates the ſame goods to be opened and aired, but with an excep-tion, "unleſs his Majeſty ſhall think fit, by his order in Council, "to direct otherwiſe."

"The quarantine for forty days is to commence and be computed from the day each ſhip or veſſel ſhall come to anchor "in the place appointed for performing quarantine, and not "before."

In foreign Lazarettos, the quarantine commences and is computed, from the time the cargo is landed, and not before. The beginning to compute the quarantine before the hatchways of the hold are opened, can, with reſpect to the goods, be of no utility; and if one week, or a fortnight, be conſidered as ſufficient to purge the ſuſpected merchandiſe, the continuance of quarantine for forty days would ſeem to be ſuperfluous. But the terms preſcribed for the expurgation of goods by ventilation are certainly too ſhort, and the continuing the quarantine, after they are again repacked, is a hardſhip upon commerce, without promiſing any additional ſecurity to the public.

Again, the ordering ſhips into quarantine, and exempting the goods from being opened and aired, is another hardſhip upon the merchant, from which no advantage, as a defence againſt infection, can poſſibly be expected. A quarantine ſhould never be ordered, but upon ſtrong preſumptions of its expediency; and, without loſs of time in waiting for further directions from the Council, the ſuperintendents of quarantine ſhould be preinſtructed how to proceed. The opening and airing of part of the cargo, if the crew are in good health, ſhould be begun without delay. If the airing of the reſt ſhould afterwards be judged unneceſſary, the trial already made will be ſome ſecurity, and the ſhip need not be longer continued under reſtraint. On the other hand, if it be judged proper to air the whole cargo, ten days of the quarantine, in regard to ſome of the diſtant ſtations, will have elapſed uſeleſsly, and the remaining thirty days will not be ſufficient to air the whole cargo in ſeparate parcels. For almoſt in every inſtance, it will be impoſſible to bring the cargo on deck at once; and indeed, conſidering merely the weather in

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Britain, it is hard to conceive how infected goods can be properly aired on board the veſſel that brought them. If it be ſuppoſed that other veſſels may be employed for this purpoſe, like the hulk, or floating Lazaretto at Standgate Creek; it may be aſked, if all, or any of the other twelve ſtations, appointed for the performance of quarantine, in 1780, were provided with ſuch conveniences; or, had they been found neceſſary, was it in the power of the Council to have procured them, within the time limited for quarantine, ſo as to be of ſervice, without prolonging the reſtraint of the ſhips.

Upon the whole, there appears reaſon for thinking, that the management of quarantine ſhould be entruſted to a Council of Health, diſtinct from the Privy Council. Such a board would be competent to enter into a number of details and diſcuſſions, which the Privy Council can rarely find time for. It would be enabled, upon due enquiry into the commercial intercourſe of the different ſtates on the Continent, ſo far as concerns their trade in merchandiſe ſuſceptible of infection, to eſtabliſh rules adapted to their various ſituations. Neither influenced by political intrigue, nor miſled by ſpecious repreſentations of intereſted individuals, it would enter into a liberal and extenſive review of the ſubject. Permanent regulations would be eſtabliſhed on ſolid grounds, meaſures would be concerted and provided for occaſional exigencies, and the requiſite diſpoſitions would be made, for carrying the preconcerted meaſures effectually into execution. But buſineſs of this kind ought not to be undertaken when danger impends, and reſolutions muſt be paſſed immediately; it can only be tranſacted with ſucceſs, when there is full time to inveſtigate, and to deliberate.

It is not to be denied, that, as matters ſtand at preſent, quarantines, without being ſo ſecure a defence as is commonly imagined, are a certain heavy tax upon commerce; the benefit they

promiſe to the ſtate is very precarious, the detriment to the merchant is real. CHAP. VII.

If, on one hand, ſuch a Council, inflexible in well-founded reſolutions, would be leſs acceſſible to private ſolicitation; on the other, the merchant would know better on what he had to depend; he would be leſs diſpoſed to ſpeculate by wavering orders, and would have leſs to fear the influence of powerful interceſſion obtaining unequal indulgencies. The inevitable hardſhips upon commerce, in ſuſpected times, would be common to all; and would never be impoſed, but upon ſolid preſumptions of neceſſity.

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Temporary improvements in the preſent mode of quarantine propoſed—Conveniencies for the reception of infected ſhips, ſo that they may be relieved without delay, abſolutely neceſſary—Infected goods ſhould be purified on ſhore—Prattique houſes in ſome of the out-ports propoſed—Goods liable to quarantine ſhould be opened—The fewer the places appointed for the performance of quarantine the better.

TILL ſuch time as proper Lazarettos be eſtabliſhed in England, it will be doubly neceſſary to enforce the regulations in Turkey, and to reform the bills of health. No patent from Syria ſhould be deemed clean, that does not declare the place to have been free from the plague, at leaſt, three months[1].

As much danger might ariſe from the crew and cargo of a veſſel, coming from an infected place, being ſhipwrecked

[1] See the preceding book, chap. vi.

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on the coaſt, pilots, when required in the Channel to conduct the ſhip, ſhould be obliged, if neceſſary, to go on board the ſhip itſelf[2], but (in that caſe) it is not neceſſary the quarantine of the pilot ſhould be ſo long as that of the crew. The pilot boat ſhould be provided with a rope, to heave into the ſhip, that ſhe may not be under the neceſſity of taking a rope from within board. No letters, or parcels of any kind whatever, ſhould be received into the boat. All other perſons ſhould be prohibited, under ſevere penalties, from going on board the ſhip, except ſhe be in diſtreſs for hands, in which caſe the additional hands ſhould perform the ſame quarantine with the reſt of the crew.

All ſhips from Turkey, whereſoever bound, who have not the plague actually among the crew, or have not loſt men by it on the paſſage, ſhould repair, if poſſible, without communicating with any other port, to Standgate Creek.

Some ſmall temporary buildings on ſhore would ſeem to be neceſſary there, not for the reception of goods, but for the accommodation of paſſengers, as well as for any of the crew who may happen to be ſick. Theſe muſt be encloſed and guarded in the manner of a Lazaretto. The hoſpitals for the ſick ſhould be diſtant from the lodgings for paſſengers, and in place of the form of wards, ſhould be diſpoſed into ſmall ſeparate chambers. A part ſhould be allotted for perſons with ſuſpicious ſymptoms, who fall ſick during the unlading of the veſſel. There ought to be a ſmoking room, and a laundry. It will be proper alſo to have a magazine for the powder of the ſhips.

[2] "No pilot ſhall go on board any ſhip or veſſel obliged to perform quarantine, "in order to conduct the ſame into any port or place, but ſhall perform ſuch ſer- "vice in ſome other boat or veſſel, which boat or veſſel ſhall keep as much to the "windward of the ſhip or veſſel, ſo to be conducted, as poſſible; and if any pilot "or other perſon ſhall go on board, ſuch ſhall perform quarantine in like manner "as any perſon coming in the ſhip or veſſel ſhall be obliged to perform the ſame." London Gazette, Dec. 19, 1780.

Cloſe

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Cloſe to the water-ſide, there ſhould be a prattique houſe; and near to that, a quay with barriers, as before deſcribed[3], for delivering proviſions to the reſpective ſhips, each of which ſhould retain one boat, for tranſporting proviſions and other neceſſaries. The ſuperfluous boats of the ſhips ſhould be purified, and ſecured on ſhore till the end of the quarantine. The mode formerly, and perhaps ſtill, practiſed, of receiving proviſions by means of boats from the ſhore, is liable to many abuſes.

Paſſengers, with their ordinary baggage, ſhould be brought on ſhore; their trunks, &c. fumigated and aired, and the length of their quarantine regulated according to circumſtances explained before. The obliging paſſengers to perform a quarantine of forty days, would be unneceſſary, if there was a place for their reception on ſhore, ſo that they might immediately, on their arrival, be ſeparated from the cargo, and the crew.

The pilot alſo ſhould be landed, as ſoon as the veſſel is moored, ſhould have freſh clothes ready for him at the Lazaretto, and, after being fumigated, waſhed and ſhaved, perform a quarantine of ten days, in a chamber by himſelf, without communication with the paſſengers, or with others in quarantine. But if the hold has been opened, while the pilot remained on board, he ſhould, in that caſe, be obliged to perform the ſame quarantine with the paſſengers.

The goods are ſuppoſed to be purified on board the hulk; and muſt be ſubjected, as nearly as poſſible, to the ſame treatment as on ſhore. Might not fumigation be attempted there[4]?

Smuggling goods from the hulk, may perhaps be more eaſily practiſed than from a Lazaretto. But the guard-boats ſhould

[3] See before, chap. i. and ii.

[4] See before, chap. v.

be

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be authoriſed to fire into any boat approaching the hulk, or any of the veſſels in quarantine, excepting ſuch boats as carry the ſanction of the health office. When goods are diſcharged from the hulk, it ought to be well fumigated, before taking in others [5].

Should a ſhip happen to loſe any of the crew, by the plague, in the courſe of the paſſage, or arrive in the Channel with perſons actually ſick of it, inſtead of proceeding to the river Thames, ſhe ſhould, without delay, repair to the place deſtined for the reception ſolely of infected ſhips. Whether this be St. Helen's Pool, or elſewhere, it will be abſolutely neceſſary, for reaſons already aſſigned, that there ſhould be a temporary Lazaretto as well for paſſengers as for the ſick.

[5] "We are of opinion (ſays Lind) that beſides the materials of wool, cotton, "linen, and apparel almoſt of every ſort, the ſeeds of an infection are ſtrongly ad- "heſive to many other ſubſtances in infected chambers, and other places. Beams "of wood, as in ſhips, chairs, bedſteads, and other furniture, as alſo various "utenſils uſed about the ſick, may doubtleſs become tainted. This has been ſuffi- "ciently evinced by the foregoing relation of the courſe of the infection in the "fleet—When ſhips are to be put into the dock, it is uſual to remove the men out "of them into hulks in the harbour. Theſe hulks are old ſhips, containing, as "one would imagine, nothing but decayed timbers, capable of receiving or retaining "infection. They may be compared to ſuch old uninhabited houſes as have the "windows broken, or, at leaſt, at all times kept open, and where the wind, cold, "and rain have the freeſt acceſs. Not long ſince, a part of the company belonging "to the America, having ſlept in one of thoſe hulks, I remarked ſeveral of them "were afterwards ſeized with fevers of a low and bad kind; while the other part of "the crew, who ſlept on board their proper ſhip, were affected only with ſlight "colds. I have indeed frequently met with inſtances of bad fevers, which have been "got from thoſe cold, raw hulks." Lind on Infection, p. 222. 225.

Doctor Mackenzie, of Conſtantinople, has a curious remark on the difficulty of extirpating infection—"Comte Caſtellane (ſays he) had, for three years running, "perſons attacked in the ſame manner, in the months of July and Auguſt, notwith- "ſtanding all poſſible precaution uſed in cleanſing the room, and even white- "waſhing it. At laſt by my own advice to his Excellency, he built a ſlight counter- "wall, ſince which there has been no accident in that room, now five years ago." Phil. Tranſ. vol. 54.

As

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As in all probability the arrival of ſhips from Turkey, under ſuch circumſtances, would happen very ſeldom, it might be unneceſſary to have a full eſtabliſhment of officers conſtantly reſiding at the foul Lazaretto. When no ſhip was in port, one head officer, with ſome guardians, might be ſufficient; aſſiſtants might be ſent from the other Lazaretto, when occaſion required.

The purification of the cargo, on board the ſhip, I conceive to be impracticable; and there are many objections to the attempting it in the hulk. The preferable way would be to land the goods, if a temporary encloſure, with ſheds, could be contrived ſufficiently ſecure againſt ſtealing and ſmuggling. The approach of all fiſhing boats, or others, ſhould be prohibited under pain of death; and if any ſuch attempt be made in the night, the centinels ſhould be empowered to fire upon them. Perhaps a ſmall battery might be of ſervice.

The goods ſhould be landed there, with the uſual precautions, in a lighter provided by the Lazaretto. All other regulations ſhould be maintained rigorouſly, and the ſhip ſhould perform three *ſereines*, one of ſeven, and two of five days. Should the greater part of the cargo be cotton, and, in the courſe of unlading, any perſons happen to be infected, it may perhaps be more adviſable to deſtroy the whole, than to truſt to expurgation, under the defect of proper and ſecure conveniencies.

Accommodations of the kind now mentioned might poſſibly be erected at a trifling expence; but as a place for the reception of ſhips, actually infected, would at all times be deſirable, even after the eſtabliſhment of a regular Lazaretto, it might perhaps be better at once to fix on a proper ſituation, and to immure a ſmall extent of ground, within which, ſheds or other temporary conveniencies might be raiſed, till more ſubſtantial could be erected.

This

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This foul Lazaretto ſhould be in a healthy, ſolitary ſituation; remote from any large town, and even at ſome diſtance from a village, or the high road.

Beſides theſe two principal Lazarettos, there might be, at one or two of the out-ports, a prattique houſe, for the convenience of ſhips liable to quarantine, where they might be ſupplied with water, or other neceſſaries, in their way to the Lazaretto. Theſe would require no more than a ſmall encloſed quay, with a barrier, from which water and proviſions might be delivered to the ſhip's boat, in the ſame manner as at the Lazaretto. After receiving which, the ſhip ſhould forthwith be obliged to proceed to one or other of the Lazarettos, according to the circumſtances of the crew on board, ſubmitted to ſome public perſon of note, reſident in or near the place, and appointed by authority to act as magiſtrate of health. Where the caſe appears doubtful, or not comprehended under any of the proviſional orders, the ſhip might be permitted to remain at anchor, well guarded, till an anſwer be received from the Council.

This ſeems to be all that is proviſionally neceſſary, ſo far as the Levant trade is concerned; for though it might better ſuit the conveniency of each trading town, to have their ſhips perform quarantine nearer home, yet ſo few of thoſe towns, beſides London, carry on a direct trade with Turkey[6], that it is certainly more conſiſtent with the public ſafety, that quarantine ſhould be performed in one or two places, under the inſpection of experienced officers, than in ſeveral different parts of the kingdom, where ſhips, from ſuſpected places, do not arrive perhaps once in two or three years.

The caſe may be different when alarm is ſpread from the Continent, the trade with which is more generally diſtributed among

[6] Porter's Obſervations, p. 392.

the

the Britiſh ports; but even then, the ſhips ordered into quarantine, had perhaps better be brought as much together as poſſible, in ſome commodious ſituation, where they may more effectually be watched and directed, than in places remote from the reſidence of the Council of Health.

In December, 1780, on account of the plague in the Ukraine, a quarantine was ordered for ſhips from the Baltick, that is from Dantzick, the ports of Ducal Pruſſia, Pomerania, &c. and, for the performance of this quarantine, ſeven or eight different places were appointed in England, four in Scotland, one in Jerſey, and one in Guernſey, in all thirteen.

So many places can hardly be ſuppoſed properly provided for the reception of ſuſpected ſhips, and far leſs for the reception of perſons who may happen to be infected during the quarantine. If this latter proviſion be wanting, ſhould the plague break out among the crew, it might ſpread fatally; or, if the ſick were landed, it might pervade the neighbouring villages. For this reaſon, were it practicable to diminiſh the number, a few places might more eaſily be ſoon put into a ſuitable condition, for the reception of the ſick. This circumſtance ſeems to be indiſpenſably neceſſary, for if the ſick are not ſeparated from the ſound, the crew, from the dread of infection, will with great difficulty be confined on board; and the greater is the number of unprepared places thus left defenceleſs, the greater will be the danger.

By the ſame order of quarantine, all ſuſceptible goods were to be opened, unpacked, and aired, for one week; other than hemp, flax, paper, ſilk, linen, cotton wool, cotton yarn, or manufactured wool, &c. &c. which were to be aired for a fortnight, unleſs his Majeſty, in Council, ſhould think fit to direct otherwiſe. The quarantine is fixed indiſcriminately at forty days, commencing from the day the ſhip comes to anchor.

It may be again remarked here, that if it depends upon a ſubſequent order of Council, whether the goods are to be unpacked or not, ten days, or more, of the quarantine will have elapſed, before it be known whether the cargoes of ſhips, arriving in the remote parts of Britain, are to be aired or not, which will render quarantines, in point of ſecurity, very uncertain.

But if the goods are to be unpacked and aired on ſhore, on an open beach, they will be ill protected againſt thieves and ſmugglers. If on board of ſhip, it muſt be done in parcels ſucceſſively, and theſe will either be very imperfectly ventilated, or the forty days will expire before the airing be finiſhed. Formerly at Marſeilles, the *ſereines* were performed on board of ſhip, not in the Lazaretto; but the practice being found ſometimes to endanger the overſetting of the veſſel, was for that, amongſt other reaſons, aboliſhed[7].

On the ſuppoſition of the ſuſceptible goods, of either claſs expreſſed in the order of Council, containing ſeeds of contagion, will a week's ventilation in the one caſe, or a fortnight's in the other, be ſufficient to diſlodge or deſtroy them? If ſo, it were unneceſſary to prolong a ſhip's quarantine to forty days, as ſhe might be unloaded, and her cargo aired, in twenty or twenty-five.

If we ſuppoſe, for a moment, the plague had diſcovered itſelf in any of theſe ſhips from the Baltick, ill prepared as, I apprehend, we were for defence, what a ſtrange confuſion would it have occaſioned. But if, carrying the idea further, it be ſuppoſed to have manifeſted itſelf (which is poſſible) in ſeven or eight of the thirteen places, in Britain, deſtined for the reception of veſſels liable to quarantine, how much more would the general conſternation have been increaſed, and what can be reaſonably expected from the wiſeſt orders of a Council of Health, haſtily iſſued, where

[7] Memoire ſur le Bureau de la Santé, p. 28.

no

no regular plan has previouſly been eſtabliſhed, to facilitate the carrying them into execution: the opportunity of acting may be loſt, before the directions of the Council arrive.

As to the continuing a ſhip forty days in quarantine, and at the ſame time diſpenſing with opening and airing the merchandiſe, it is difficult to conceive what good purpoſe is propoſed. If the cargo be ſuſpected, it ſurely can anſwer none; if it be not, and the quarantine is intended for perſons on board, it might ſafely be abridged one-half.

Upon the whole, ſo far as I have been able to learn, the preſent mode of performing quarantine, in Britain, is extremely defective. The captains and mariners who have been in the Mediterranean, comparing it with the practice of foreign Lazarettos, conſider it in a light little better than that of an oppreſſive empty form. The officers entruſted with the execution of ſuch regulations as there are, too often act as if they entertained no better opinion of them; and, between both, the public ſafety is abandoned to chance.

I may, perhaps, in ſome things relating to the preſent practice of quarantine in England, have been miſinformed; in others, I may have erred for want of fuller information: but as there can be no doubt of its appearing, upon enquiry, that many abuſes do actually exiſt, and that adequate proviſion has not been made for probable contingencies, it ſurely will be adviſable not to defer the correction of the one, and the concerting preſervative meaſures againſt the other, till the actual exiſtence of the evils to be prevented, may render the beſt meaſures precarious or abortive.

A

TREATISE

OF THE

PLAGUE.

BOOK VI.

Of the Police in Times of the Plague.

CHAP. I.

Some account of the early orders againſt infection of the plague—Theſe orders require reviſal—Remarks on the quarantine acts of James the Firſt, in 1603, and George the Firſt, in 1720—Obſervations on the meaſures recommended by Doctor Mead, in his Diſcourſe on the Plague—A remarkable proteſt of the Lords in 1720.

CHAP. I.

A Strict obſervance of the laws and regulations of quarantine, where proper Lazarettos are eſtabliſhed, has been found, in general, an effectual defence againſt the plague being brought in by foreign commerce. But as the execution of theſe laws depends on the fidelity and vigilance of ſubordinate officers, who muſt unavoidably be truſted, as well as on the prudence and compliance of the perſons performing quarantine, it is no wonder the

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the precautions of the Legiſlature, however wiſely concerted, ſhould ſometimes have failed of ſucceſs[1].

As the Maritime States of the Mediterranean furniſh ſufficient proof of the utility of Lazarettos, ſo, on the other hand, they have produced examples of the plague inſinuating itſelf into countries where they had long been eſtabliſhed. But, in almoſt all ſuch inſtances, the cauſes of failure have been traced to negligence on the part of thoſe entruſted with the care of the public health, or to clandeſtine infraction of the regulations of quarantine[2].

In the ſixteenth and ſeventeenth centuries, Britain was ſeveral times viſited by the plague. The orders and regulations reſpecting the infected, ſeem to have been iſſued, in royal proclamations, or, by the municipal officers, in towns; and in the country by the juſtices of peace, but all under the ſanction of the King, in Council. How it was managed in times ſtill more remote, does not appear, but ſuch orders were iſſued by Queen Elizabeth; and in the plague at London, in 1592, the College of Phyſicians publiſhed their medical advice to the infected, which it is probable they had done before, on ſimilar occaſions, from about the middle of that century[3].

The

[1] Muratori Governo Politico, chap. i. p. 10.

From the remarks made by the late Mr. Howard, in his voyage from Smyrna, the negligence prevalent in the Venetian ſhips, is ſuch, as renders it matter of ſurpriſe, that the plague is not more frequently brought into Europe.

[2] For the introduction of the plague at Marſeilles, and at Meſſina, ſee book iii. p. 210. and book iv. p. 327.

[3] In the plague of 1500, and 1513, the Phyſicians had not, I believe, as yet been incorporated.

The early attention of government to the preventing infection, appears from a clauſe in an act of Henry the Eighth, in 1540, by which barbers in London are prohibited from uſing ſurgery, and ſurgeons from uſing barbery, and the reaſon

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The orders iſſued, in 1603, by his Majeſty, in Council, againſt the infection of the plague; the advice of the College of Phyſicians; and the orders conceived and agreed to be publiſhed by the Lord Mayor and Aldermen, by direction of the Privy Council[4]; were probably much the ſame with the orders uſually iſſued, on the like occaſions, in former reigns: they, at leaſt, were always republiſhed, with very little variation, in the ſubſequent plagues, in 1625, 1636, and 1665[5].

Since the year 1666, Britain, through the mercy of Divine Providence, has not been viſited by the plague; though ſeveral times greatly alarmed by the diſtemper raging on the Continent, particularly at Dantzick, in 1710; at Marſeilles, in 1720; and at Meſſina, in 1743; on all which occaſions, except in 1720, the attention of Government was more directed to the prevention of infection being brought from foreign parts, than to the framing internal regulations for the country, in caſe of its being infected.

The orders againſt the infection of the plague, publiſhed by his Majeſty, and his Privy Council, the 30th of July, 1603, conſiſt of a number of articles, and ſeem to have been drawn up with great care.

aſſigned is, "that perſons uſing ſurgery, often take into their cures and houſes "ſuch ſick and diſeaſed perſons as been infected with the peſtilence, great pox, and "ſuch other contagious infirmities—do uſe or exerciſe barbery, as waſhing or "ſhaving, or other feats thereunto belonging, which is very perilous for infecting "the King's liege people, reſorting to their ſhops and houſes, there being waſhed "or ſhaven."

[4] See the orders of Queen Elizabeth, in 1592; and, A Defenſative againſt the Plague, by Simon Kellway, Gent. Lond. 1593.

[5] Certain neceſſary Directions, &c. of the College; ſundry Orders of his Majeſty; Select Statutes, &c. Lond. 1636.

Collection of very valuable and ſcarce Pieces, relating to the laſt Plague, in the Year 1665. Lond. 1721.

The

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The firſt four articles regard the meetings of the juſtices; the diſtribution of the limits; the procuring exact intelligence of the places infected; the making proviſion for the maintenance of the poor; and providing ſearchers to view the bodies of the dead. The fifth article regards the ſhutting up infected houſes, whether in towns or in the country: the term of quarantine being ſix weeks, and infractions of it puniſhed by impriſonment in the ſtocks. Infected houſes are ordered to be marked; and the ſigns of infected inns, and alehouſes to be taken down. The ſixth, directs the mode of diſtributing charity. By the ſeventh, attendants are provided for perſons in quarantine. The eighth, orders proviſion to be made in every ſhire-town, of preſervatives, and remedies. The ninth, requires miniſters, church-wardens, &c. to deliver in to the juſtices, once a week, an account of the infected perſons who die, or recover. The tenth, directs ſeparate burial places in each pariſh, for ſuch as die of the plague. By the eleventh, the juſtices of the county are ordered to aſſemble once in three weeks, to examine ſtrictly if their orders have been duly carried into execution; and to make their report to the Privy Council. By the twelfth, juſtices of the hundred are to meet once a week, to enforce regulations, and to reform abuſes. The thirteenth, orders the burning, or the fumigating infected ſtuff, reimburſing the loſs of the ſtuff deſtroyed, to ſuch whoſe circumſtances require it. By the fourteenth, the juſtices are inveſted with diſcretionary power to frame ſuch other orders as they may judge convenient, communicating them, at the ſame time, to the Council; and are empowered to puniſh breaches of their orders, by impriſonment; and, in heavier offences, to refer the puniſhment to the Council. The fifteenth, empowers the juſtices, where their number happens to be too ſmall, to chuſe aſſiſtants. The ſixteenth, interdicts eccleſiaſtics, and others, from publiſhing opinions againſt the notion of the plague being contagious: "as holding it a vain thing to forbear to reſort to the "infected, and that it was not charitable to forbid it; becauſe "no perſon ſhall die but at their time prefixed." The publiſhing

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ing ſuch dangerous doctrines, was puniſhed, if an eccleſiaſtic, by reprehenſion by the biſhop, or ſuſpenſion; if a layman, by impriſonment, in caſe of perſiſting after admonition.

But theſe, and other regulations of the civil magiſtrate, were ſo often diſregarded, or violated[6], that in 1604, the year immediately ſucceeding a plague at London, it was found neceſſary for the Legiſlature to interfere, (I believe for the firſt time) and to ſupport ſome of them by an expreſs act of parliament.

By this ſtatute it is enacted, [7] "that if any perſon infected "with the plague, or dwelling in any infected houſe, be com- "manded by the mayor, conſtable, or other head officer of his "town or vill, to keep his houſe, and ſhall venture to diſobey "it; he may be inforced, by the watchmen appointed on ſuch "melancholy occaſions, to obey ſuch neceſſary command: and "if any hurt enſue by ſuch inforcement, the watchmen are "thereby indemnified. And farther, if ſuch perſon ſo com- "manded to confine himſelf goes abroad, and converſes in com- "pany, if he has no plague ſore upon him, he ſhall be puniſhed "as a vagabond, by whipping; and be bound to his good beha- "viour: but if he has any infectious ſore upon him uncured, "he then ſhall be guilty of felony."

This act, of James the Firſt, did not paſs without oppoſition[8], and its continuance was limited until the firſt ſeſſion of the next

[6] "And foraſmuch as divers perſons infected with that diſeaſe, and others inhabit- "ing in houſes and places infected, as well poor people and unable to relieve them- "ſelves, that are carefully provided for, as others which of themſelves are of ability, "being commanded by the magiſtrate or officer of or within the place where the "infection ſhall be, to keep their houſes, or otherwiſe to ſeparate themſelves from "company for the avoiding of further infection, do notwithſtanding very danger- "ouſly and diſorderly miſdemean themſelves." Preamble to the Act.

[7] Blackſtone's Comment. vol. iv. book iv. chap. 13.

[8] The bill was preſented on the 11th of May, 1604, and on the 18th, committed to a Committee of twenty-five members. On the 25th, having been reported with a

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parliament. But it was further continued by ſubſequent acts; and in the ſixteenth year of Charles the Firſt, 1640, "from "thenceforth until ſome other act of parliament be made "touching its continuance or diſcontinuance."

It appears from the Journals of the Houſe of Commons, that in the year 1665, the plague then raging at London, a Committee, on the 11th of October, was appointed to inſpect this act, and to prepare and bring in a bill to ſupply its defects; and to provide remedies to prevent the ſpreading of the contagion. The bill after being twice read, on different days, was, on the 24th, ordered to be engroſſed, with amendments. It was paſſed by the Commons; but the Lords, on the 30th, having returned it with ſome amendments, a conference was deſired. The day following, the conference was reported; and the queſtion being put, to adhere to the former votes, was reſolved in the affirmative. The ſeſſion terminated the ſame day, and the matter never having been reſumed ſince, the ſtatute of James the Firſt remains ſtill in force.

The orders againſt the infection of the plague, made in old times, though defective in ſome reſpects, and in others liable to objection, muſt be allowed to contain many excellent articles. It were therefore to be wiſhed, that a reformation ſhould be attempted, by perſons who would enter deliberately into a review of the former practice in England, as well as in other countries, and who, by their local knowledge of Britain, and acquaintance with the quarantine, and Poor's Laws, may be ſuppoſed qualified for ſuch an undertaking.

vacat, as not fit to be retained, a new bill was prefented, which was read the next day; and, on the ſecond reading, the 5th of June, was committed to the former Committee. On the 14th the bill was reported with amendments, and, upon the queſtion, was ordered to be engroſſed. It paſſed two days after, but not without oppoſition. The Lords made ſome amendments, reſpecting the exemption of the Univerſities, which were agreed to.

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The Italian ſtates afford ſeveral inſtances of the ſucceſs of a vigorous exertion of the police; and though all the meaſures adopted there, or in other foreign countries, cannot be tranſplanted into a free government, yet ſome of them can: whilſt others, perhaps, might be ſo modified as to be admitted, without offence to the popular notions of liberty, prevalent in the Britiſh dominions.

Conſcious of my own inability to undertake the propoſed reformation, it is my intention, in the following chapters, to reſtrict myſelf to ſome of the more material points relating to the police, in times of the peſtilence: not directly in reference to any particular town, but in a general view; for however the expedience of meaſures may be admitted, abſtractedly, their application muſt always be regulated by local circumſtances.

What is to be offered on theſe heads, being chiefly the reſult of various reading, references will occaſionally be made, to the authors from whom I have borrowed aſſiſtance; and the late Dr. Mead, ſo far as I know, being the principal Engliſh writer on the ſubject, ſome preliminary remarks on his book, naturally preſent themſelves. It is with unfeigned pleaſure I agree, in ſeveral points, with that eminent man, and with reluctance that I find myſelf obliged to differ from him, in others. But, in ſubjects of this kind, variety in opinions muſt be expected; and ſuch are likely to be moſt unpopular, which favour the laying mankind under unuſual reſtraints.

Dr. Mead, after obſerving "that the management in former "times neither anſwers the purpoſe of diſcovering the beginning "of the infection, nor of putting a ſtop to it when diſcovered, "thinks other meaſures ought certainly to be taken[9];" and then propoſes ſuch as to him appear the moſt reaſonable and ad-

[9] Mead's Short Diſcourſe, p. 96. edit. 7.

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viſable. I ſhall briefly conſider theſe, in the order they preſent themſelves in the ſecond chapter of his Diſcourſe on the Plague: ſuppoſing the book lying before the reader.

I concur entirely in the Doctor's opinion of the propriety of eſtabliſhing a Council of Health [10].

It is undoubtedly of the utmoſt importance, that the plague ſhould be diſcovered early in its beginning. But it does not appear that more effectual meaſures are propoſed for this purpoſe, than thoſe before in practice. The appointing men for ſearchers, inſtead of women, ſeems not a material improvement; at leaſt, the notion of decency in England, would require female ſearchers for the female ſex.

If the articles concerning ſearchers and ſurgeons, contained in the orders for health by the mayor and aldermen, be conſulted, it will appear that the want of timely diſcovery, ſo far as regards ſearchers, was not to be imputed to a defect in the meaſures concerted for that purpoſe, ſurgeons having been appointed to aſſiſt the ſearchers occaſionally. It is true, that in the public orders for health, in 1636, as well as in 1665, alluſion is made to abuſes "heretofore in miſrepreſenting the diſeaſe," to prevent which, aſſiſtant ſurgeons were appointed. But as theſe abuſes proceeded from other cauſes, beſides ignorance [11], they will not be prevented, merely by the ſubſtitution of male inſtead of female ſearchers.

Nor were ſearchers the only inſtruments employed, in the old orders, for procuring early intelligence. Examiners were appointed in every pariſh, and the maſter of every houſe, upon any perſon in the family falling ſick, was required to give imme-

[10] See before, book v. chap. viii.

[11] Reflections on the Bills of Mortality. Collection of Scarce Pieces, p. 54.

diate

diate notice to the examiners. If therefore the management, in former times, did not anſwer the purpoſe of diſcovering the beginning of infection, it was not for want of wiſe regulations, but owing to the not rigorouſly carrying them into execution; and without reviving moſt of them, and providing againſt ſimilar infractions, in future, it is to be feared the mere offer of a reward for diſcovery will not prove ſufficient. CHAP. I.

The removal of the infected family, and the ſeparation of the deceaſed from the healthy, though allowed to be proper, is by no means a new practice in England, or uncommon in other countries. Indeed, perſons infected, or dwelling in the ſame houſe with thoſe in the plague, were obliged to confine themſelves at home, when required ſo to do by the magiſtrate. But this ſevere reſtriction, was modified by the orders for health, iſſued by the Lord Mayor and Aldermen, by which, perſons infected were permitted to be removed to the peſt-houſe, to a tent, or to ſome other houſe; and perſons who poſſeſſed two houſes of their own, were at liberty either to remove the ſick, or the ſound, to the other houſe, abſtaining from further communication [12]. The quarantine for the ſound, in this caſe, was one week, at leaſt; which certainly was too ſhort.

The College in their advice, in 1636, do not urge the removal of the ſick, but, ſuppoſing it practiſed, think it ſhould not be done without permiſſion of the overſeers, &c. and though the patient do not die, recommend the infected houſe to be ſhut up forty days, after his recovery. In 1665, an addition is made to this article, "or rather remove them all to the peſt-houſe [13]." By which it cannot be meant that all were to be removed to the ſame place, which would have been the expoſing them to more danger than if left in their own houſes; becauſe the ſame article expreſsly aſſerts, that means are to be preſently uſed to preſerve

[12] Orders for health. Article, "None to be removed, &c."

[13] Advice of the phyſicians, article 6.

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the ſound as well as to cure the infected; and, in their earlier orders, regarding men or goods from foreign places infected, two places for entertainment were to be provided, "one for the ſound, "and another for the infected[14]," which no doubt was alſo the caſe in regard to peſt-houſes.

Doctor Mead very juſtly reprobates the cuſtom of ſhutting up the ſound and the ſick in the ſame houſe[15], and inſtead of barely permitting the removal of the ſick, adviſes their removal to be enforced, at the beginning, by the magiſtrate's authority[16]. This precept, of removing the infected from their houſes, by force, is the moſt material thing that is new in the Doctor's rules, with reſpect to England. In regard to foreign countries, in Italy in particular, the practice will probably appear to have been the ſame as that he recommends, and the inſtances he produces from that country, as attended with extraordinary ſucceſs, "whenever ſimilar meaſures "happened to be put in practice[17]," are rather inſtances of the method uſually purſued there, than of extraordinary or accidental exceptions from it.

But the removal of the ſick is reſtricted to the very beginning, while their number is ſmall; for when the contagion, by that means, is not ſtopped, "and has ſpread into all quarters, the "continuance of the practice ought utterly to be condemned[18]."

I can conceive no reaſon for condemning the continuance of the practice, except that the crowding thoſe who are removed into hoſpitals be ſuppoſed a neceſſary conſequence, and that it is impoſſible to render hoſpitals ſafe, or commodious receptacles for them; both which circumſtances will admit of doubt. If preparations have not

[14] 1636.
[15] Mead, p. 92.
[16] Ibid. p. 98.
[17] Ibid. p. 101.
[18] Ibid. preface xix.

been

been too long deferred, hoſpitals may be prepared, roomy enough for the reception of conſiderable numbers of the ſick, who will be more eaſily and better attended there, than they could poſſibly be in their own houſes, diſperſed in diſtant parts of the town. When the diſeaſe, in large towns has ſpread into all quarters, the expedient of removing the ſick, becomes, on many accounts, much more difficult; but ſo far as it can be carried into execution, eſpecially with regard to the poor[19], it muſt always be of ſervice, by leſſening the number who are to be attended in the town. The practice, in itſelf, can never be condemned, though from the condition of the times, it may, to ſo great an extent as could be wiſhed, become impracticable[20].

[19] M. Du Pont, at Toulon, in 1721, obſerves, that at firſt the infected poor, whilſt the number was inconſiderable, were treated in their own houſes, but, in the ſequel, it was found abſolutely neceſſary to tranſport them to hoſpitals. "Si cela "ne ſe faiſoit pas de même, comment pourroit on ſuffire pour les faire panſer chez "eux? On l'a fait à Toulon tandis que le mal n'y a pas été violent, & pendant les "premiers jours de la quarantaine; mais à la fin on connut l'impoſſibilité de con- "tinuer à faire panſer les pauvres gens chez eux qui empeſtoient tous ceux de la "maiſon & tout y'eſt mort peu à peu." Traité de la Peſte, p. ii. p. 138.

[20] A remark of Orræus, in his deſcription of the plague in Ruſſia, in the years 1770 and 1771, deſerves a place here.

"Utut nempe æquum imo neceſſarium in exordio luis, judicabatur, infectos et "horum contubernio utantes domeſticos, quamvis ſanos a communione reliquo- "rum civium arcere, & domos eorum, in quibus nihil non ſuſpectum erat, claudere, "ne contagium ultra ſerperet; plebs tamen, calamitati huic imprimis obnoxia, "cautionem hanc, quam rigoroſe ſummum regimen exequi ſolebat, in tantum ex- "horruit, et tanto odio tulit, ut non ſolum infectos ſuos, ſed mortuos ipſos, non "obſtantibus pœnis, in contravanientes, infligendis, quovis modo celaret. Quampri- "mum vero licentia domi permanendi concederetur, et non niſi pauperrimi, vel qui "ipſi haud reluctarentur peſtiferi, in noſocomia ablegarentur, tota facies rerum "extemplo mutata fuit; nam præter pacatiorem populi animum inde obtentum, de- "nunciationes nunc ſpontaniæ et fere univerſales fiebant; hinc infectis in ipſis mali "incunabulis opem ferre licebat, & lues evidenter imminui incepit." Orræi Deſcript. Peſtis, p. 130.

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BOOK VI.

As to the diſorders committed in peſt-houſes, for which the authority of Diemerbroeck is cited[21], (and unhappily many more inſtances, of the ſame kind, might have been produced) they are the conſequences of crowding the hoſpitals beyond the power of proper ſuperintendence; of committing the ſubordinate offices to diſhoneſt perſons; or of the anarchy that often takes place, on the death of the ſuperintendents, and other ſervants of the houſe. But the abuſes alleged are not ſolid objections to peſt-houſes; they ſometimes admit of remedy, and may often, by early precaution, be prevented.

I cannot therefore help thinking, that the removal of the infected, or their ſeparation from the ſound, wherever it is practicable, muſt at all times be of ſervice. I muſt alſo diſſent from the following precept, mentioned in the Doctor's preface. "As "ſoon as ever the ſick are grown numerous, I adviſe, that they "be left in their houſes, without any of thoſe unmerciful re-"ſtraints heretofore put upon them, and the families they be-"longed to[22]."

The ſeparation of the healthy from the infected, ſo neceſſary in the beginning, for the extinction of the plague, is no leſs neceſſary in the ſubſequent ſtages, to reſtrain it from ſpreading. It is an object never to be loſt ſight of, as long as the police retains any means of exertion. The ſhutting up the healthy with the infected, to periſh miſerably together, was an inhuman practice[23], and muſt have proved deſtructive to many families. But

The practice of removing infected families from their houſes, may, no doubt, induce many to conceal the diſtemper, but the permitting them to remain, without ſeparation, by ſpreading the infection, will do harm not to be compenſated by an early application of the ſick for medical advice. If the diſtemper evidently decreaſed after the reſtriction was taken off, it probably was in the decline of the ſeaſon.

[21] Mead, pref. p. xvii.

[22] Ibid, p. xx.

[23] Ibid. xvi. p. 92.

what

what would be the conſequence of not only allowing them to live promiſcuouſly, but even of permitting the ſound to walk about, on condition of their carrying ſome viſible mark of their belonging to an infected family.

The intention of the ancient police, in encouraging the inhabitants to fly to the country, while there was yet time; or to ſhut up cloſe in their houſes, before the infection had reached them; in prohibiting public aſſemblies, and even divine ſervice; and in obliging convaleſcents, for a certain time after their recovery, to remain at home; was certainly to prevent an intercourſe deemed highly dangerous; to leave a ſpace more wide, and leſs favourable to contagion, for thoſe who, by public duty, were obliged to make their daily appearance in the ſtreets; and at the ſame time, to leſſen the multiplied cares of the magiſtrate, in preventing diſorders, and in ſuccouring the general diſtreſs.

At a period, when crimes and diſorders are hourly increaſing, when ſome of the magiſtrates, and many of the officers of the police muſt probably have periſhed; while few will be found willing to accept of the vacant offices; to remove reſtraints which will increaſe the trouble, as well as danger, attending the execution of public duty, would be a dereliction that nothing leſs than a ſtate of the laſt extremity, which it is to be hoped will hardly ever happen, could juſtify.

If the healthy and ſick are left in the ſame houſe, what powers of police can penetrate the interior of families, or what regulations can be enforced to prevent an intercourſe fatal to the members of them? But if the ſound, belonging to infected families, were at the ſame time permitted to walk abroad, might they not communicate the infection to others, and, thus expoſed, would they not themſelves run a double riſk of infection?

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The authority of the Chevalier Langeron, who ſpeaks from his own extenſive experience at Marſeilles, is very material on this head. He ſays, he was prevailed on, through complaiſance, in the beginning of his adminiſtration, (that is, near the height of the plague) to permit ſome infected families to remain in their own houſes; the conſequence of which was, that they all fell ſick. He afterwards, with good ſucceſs, purſued a different plan; he cauſed the family infected to be immediately removed, the ſick to an infirmary, the ſound to a Lazaretto, and then, burning the clothes, &c. which had been uſed by the ſick, he carefully ſmoked and purified the houſe, for the reception of the family, on the expiration of their quarantine. He was very ſenſible of the hardſhip of ſuch a meaſure, but experienced the neceſſity of it; for ſo many were averſe from leaving their houſes, and the contagion ſpread ſo furiouſly, where they were indulged in their wiſh to remain, that unſurmountable difficulties aroſe, from the multitude of the ſick; and perſons in eaſy circumſtances, who conceived themſelves ſecure in their retreat at home, would have found themſelves abandoned, in the midſt of a city, become one vaſt hoſpital. "Au lieu (continues he) que tout (les malades) "etant porté aux hôpitaux, & (les ſains) aux endroits deſtinés "pour la quarantaine, on y trouveroit tous les ſoulagemens né-"ceſſaires; ceux qui mourroient ſeroient enterrés dans les cime-"tieres des hôpitaux, la ville n'auroit plus ce ſpectacle, elle ſe "trouveroit en même temps dégagée de ce grand nombre de "malades, qui en augmentoit l'infection, & elle ne ſeroit plus "elle même un hôpital[24]."

The inſtances produced by Dr. Mead of the years 1625 and 1636, make nothing againſt what is here contended for; becauſe by reſtraint is never meant the confinement of the healthy and the diſeaſed, in the ſame houſe. Where that was the caſe, the ſetting open the door might, no doubt, afford the ſound an op-

[24] Traité de la Peſte, p. ii. p. 132.

portunity

portunity of ſhifting better for themſelves. But I think more is inferred from thoſe inſtances than they can well bear. In 1636, the plague is ſaid to have begun with great violence; but this does not appear from the bills of mortality: on the contrary, it would ſeem to have advanced ſlowly; to have arrived later at its height, that is, not till the end of September; and to have declined leſs rapidly than any of the other plagues in the laſt century[25]. I have not ſeen Mr. Cock's book, to which Doctor Mead refers[26], but when it aſſerts that after leave was given for people to quit their houſes, "not one of twenty of the well perſons removed fell ſick, nor one in ten of the ſick died" I cannot help thinking the aſſertion, particularly the latter part, very extraordinary; having never before heard of ſo large a proportion of the infected recovering, even in the very mildeſt plague. But granting the proportion to be nearly juſt, (which may reaſonably be doubted) and that the principal mortality happened during the reſtraint; as above ten thouſand are ſaid to have died that year, the number of infected, after the reſtraint was taken off, muſt have been very conſiderable indeed, and might rationally be aſcribed to unguarded communication, in conſequence of the reſtraint being removed: a concluſion exactly the reverſe of that drawn by Mr. Cock. In contending for an hypotheſis, another circumſtance might be alleged, as a conſequence of the removal of former reſtraints, namely, the long continuance of the plague of 1636, which is ſaid to have laſted twelve years.

CHAP. I.

In regard to 1625, the Doctor candidly obſerves, that the remarkable decreaſe of mortality, upon the diſcontinuing to *ſhut up houſes*, happened ſo late in the year, that ſomething doubtleſs might be owing to the near approach of winter, as well as to the taking off the reſtraint, the beginning of September; he adds, "yet the diminution was ſo great, that it is, at leaſt, paſt diſ-

[25] Traité de la Peſte, p. 274 and 276.

[26] Mead, p. 95.

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" pute, that the liberty then permitted was no impediment to " it." But upon conſulting the bills of mortality, the diminution of burials, in 1625, was not found ſo remarkably different from the diminution in other years, allowing for the different periods at which the mortality reached its greateſt height. In 1603, the plague arrived at its height the firſt week of September; in 1625, the third week of Auguſt; and in 1636, not till the laſt week of September. The following table ſhews its decline.

Bill of Mortality at London.

Week.	1603	1625	1636	Week.	1603	1625	1636
September,				October,			
1ſt.	3035	3344	—	6th.	1641	538	921
8th.	2724	2550	—	13th.	1149	511	752
15th.	2818	1072	—	20th.	642	331	555
22d.	2195	1561	—	27th.	580	134	458
29th.	1132	852	928				

It muſt be acknowledged, that from calculations of this kind inferences muſt be drawn with much caution; and that, in aſcribing the decline of the plague to the meaſures, at different periods, adopted by the police, allowance muſt always be made for the concurrent change in the conſtitution of the air; which, independent of all human means, is the great agent in the plague's increaſe, as well as in its decline, and its ceſſation [27].

The removal of infected families to ſome diſtance from town, propoſed by Doctor Mead [28], is conſonant to the practice abroad. But it may deſerve conſideration, whether at the beginning it might not conduce more effectually to a prompt diſcovery of the diſtemper, to have, in each pariſh, a place prepared for the reception of the infected, to which they might be immediately removed,

[27] See before on this ſubject, book iii. ch. v.

[28] Mead, p. 98.

more within reach of their connexions, than when ſome miles diſtant from town. When the diſeaſe begins to ſpread, this delicacy ought to be laid aſide. The infected as well as the ſuſpected families ſhould be removed with all ſpeed, without waiting for night[29], becauſe leſs is to be apprehended from the chance of ſpreading the infection, by conveying theſe families through the ſtreets, in the day time, than from a delay of ſeveral hours, during which, the ſound part of the family muſt of courſe ſuffer confinement in the infected houſe.

The indulgence propoſed by the Doctor, for the rich who may happen to be infected, to be tranſported to their country houſes, inſtead of Lazarettos[30], may be attended with conſiderable riſk of ſpreading the infection, not only on the road, in the inns[31], but to diſtant parts; for it would diſtract the police, to attempt the reſtraint of families ſcattered in the country; and the ſeparation of the ſick from the ſound, in theſe great houſes, as well as the ſafety of the adjacent villages, would come to depend entirely on the diſcretion of the families themſelves. So long therefore as there are hopes of extinguiſhing the diſtemper where it firſt broke out, it ſeems adviſable to permit no ſuch indulgence, and only to provide Lazarettos for the opulent, diſtinct from thoſe for the poor.

When the ſick families are gone, ſays Doctor Mead, "All the "goods of the houſes, in which they were, ſhould be burnt, "or rather buried deep under ground, where there is not a wide "ſpace convenient for burning them[32]." I have before given

[29] Mead, p. 99.

[30] Ibid.

[31] The advice of the College, in 1636, contains an article, "Caution concerning "flying into the country," which is ſomewhat altered in 1665, article 11. Both may be conſulted.

[32] Mead, p. 108.

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my opinion on the practice of burning infected merchandiſe[33]; and ſtill concur with thoſe who think the burning of furniture not only in general unneceſſary, but liable to many objections[34].

The viſitation of the dwellings of the meaner ſort of the inhabitants, and, where they are found ſtifled up too cloſe, and naſty, the ſending ſome into better lodgings, and making proper proviſion for keeping them all clean and ſweet[35], are very properly recommended.

The waſhing and cleanſing the ſtreets; the removal of all nuiſances; the prohibiting common beggars[36], &c. &c. &c. are precautions common from time immemorial in all countries, and were repeated in the old orders for health, by the mayor and aldermen, in 1603.

If thoſe early precautions we have mentioned (adds Doctor Mead) "prove ſucceſsful, there will be no need of any methods for "correcting the air, purifying houſes, or of rules for preſerving

[33] Book v. chap. v. and vi.

[34] Orders againſt the infection, art. 13, and Muratori, lib. i. c. ix. Muratori, after having mentioned ſome of the inconveniencies attending the burning of furniture, &c. proceeds thus, "furono dunque inventate eſpurgazione regolate, merce delle quali ſi "poſſono conſervare quaſi tutte le Maſſerizie, veſti, & mobili delle caſe infette e ſoſ- "pette. Baſta oggidi ſolamente conſegnare al fuoco i pagliacci, e pure le ſole paglie, "i guanciali, i cuſcini, i cenci o ſia gli ſtracci, & altre robe de minor conto, che ab- "biano immediatamente ſervito agli appeſtati, ſiccome ancora le piumi de' Matteraſſi, "poiche ſi poſſone molte bene eſpurgare le lane, e le fodore d'eſſi." Muratori Governo Politico, p. 71.

Regular purifications were then invented, by which almoſt all may be ſaved of houſhold goods, apparel, and furniture. It is, at preſent, only neceſſary to burn ſtraw beds, or rather the ſtraw; pillows, cuſhions, old clothes, rags, or other things of ſmall value, which have been uſed immediately by the infected; as alſo the feathers of beds or mattreſſes; but the wool, and the lining of the mattreſſes, can be perfectly purified.

[35] Mead, p. 109.

[36] Ibid. p. 111.

"par-

" particular perſons from infection: to all which, if the plague got head, ſo that the ſick are too many to be removed, regard muſt be had[37]."

CHAP. I.

Correcting the air, purifying houſes, and preſerving particular perſons from infection, would ſeem to be material objects of attention from the beginning, and not to be deferred, till the number of the ſick ſo increaſes, that their removal to the Lazaretto becomes impracticable. The perſons employed in removing the ſick; in nurſing them; in medical attendance; in tranſporting the furniture, and ſtuff to be burnt; or in white-waſhing the houſe, when it is not to be burnt, are all expoſed to catch the diſeaſe, and if there be means of protecting them, they ſurely ought to be immediately employed, however few the ſick, or the number of infected houſes.

The methods of purifying the air by fire and ſmoke[38], of which Doctor Mead appears not to entertain a favourable opinion, will come under conſideration in another place; it need only be remarked here, that when the preſervation and purifying of houſes is reduced to the ſimple precept of keeping them clean, and cool, and the exemptions of the Perſians from the plague, is ſuppoſed to be owing to their being the cleanlieſt people in the world; it ſhould be remembered, that the Turks, in the Ottoman dominions, are not leſs cleanly than the Perſians, and yet their country is often ravaged by that dreadful diſtemper. It muſt, at the ſame time, be acknowledged, in favour of the Doctor's remark, that the large airy houſes of perſons of diſtinction in Turkey, ſuffer, in general, much leſs ſeverely from the plague, than the more confined and leſs cleanly habitations of the inferior ranks.

[37] Mead, p. 112.
[38] Ibid. p. 113.

Doctor

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Doctor Mead's Diſcourſe was written by command of the Secretary of State, and in conformity to ſome of the meaſures he propoſed, for ſuppreſſing the infection, in caſe of the plague being imported into Britain, a bill was brought into Parliament, in December, 1720, which paſſed into a law, in the month of January.

The plague had, at that time, declined at Marſeilles; but former accounts from thence had ſpread terror univerſally over Europe, and the apprehenſions ſtill ſubſiſting in England might perhaps conduce to render the oppoſition to the act, in both houſes, leſs powerful than it was. This ſeems the more probable, from the eagerneſs ſhown next year, after the decline of the plague in France, firſt, to ſhorten the continuance of the act, and next, to repeal certain clauſes in it, which had given occaſion either to real or pretended uneaſineſſes. Both purpoſes were effected by two ſubſequent acts, in 1721, of which mention has been made before [39]. Some account of the clauſes, which were particularly calculated to prevent the ſpreading of infection, when the plague actually exiſts in Britain, was reſerved for this place.

While the Quarantine Bill was yet depending in the Houſe of Commons, a petition, againſt certain clauſes of it, was preſented by the Levant Company, praying to be heard by themſelves, or council. Some of the members of that Company were accordingly heard, on the ſubject of their petition, in a Committee of the whole Houſe.

In the month of December, 1721, the City of London preſented a petition to the Houſe of Lords, againſt certain clauſes of the Quarantine Act, which, after a debate, was rejected by 63 voices againſt 22. In the week following, a motion being made in the Houſe of Lords, by Earl Cowper, and ſeconded by

[39] Book v. chap. vii.

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the Lords Bathurſt, North and Grey, that a bill be brought in for the repeal of two clauſes in the Quarantine Act, the queſtion was reſolved in the negative, by 39 voices againſt 20. CHAP. I.

Within a month after this tranſaction in the Houſe of Lords, a motion, to the ſame purpoſe, was made in the Houſe of Commons, and upon a diviſion, 115 againſt 95, leave was given to bring in a bill for the repeal. The bill paſſed the 29th of January, and received the Royal Aſſent the 12th of February, under the title of "An Act for repealing ſuch Clauſes in the Act paſſed "in the 7th Year of his Majeſty's Reign (relating to Quarantine "and the Plague) as gives Power to remove Perſons from their "Habitations, or to make Lines about Places infected[40]."

The queſtions much agitated at that period, are ſtrictly connected with my preſent ſubject, and the arguments, then employed, are likely to be revived, whenever regulations for times of actual infection in the country ſhall come under parliamentary diſcuſſion. I have thought proper therefore, to tranſcribe four clauſes from the expired act, and a remarkable proteſt of the Lords, when the motion for a repeal met with a negative.

But it ſhould be remarked of theſe clauſes, that the ſecond and fourth only were repealed; and that the third, though alſo objected to, by the City of London, was left remaining, and has been retained in the ſeveral Quarantine Acts made ſince that time.

The ſelected clauſes are the following.

I. And be it further enacted, That if at any time or times hereafter any city, town, or place within Great Britain or Ireland, or the iſles of Guernſey, Jerſey, &c. ſhall be infected with the plague, and the ſame, upon examination, ſhall be made

[40] In the preamble of the act, it is ſaid, "Whereas the execution of the powers "and authorities mentioned in the ſaid recited clauſes, might be very grievous "to the ſubjects of this kingdom."

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to appear to his Majeſty, his heirs or ſucceſſors, in Council, it ſhall and may be lawful to and for his Majeſty, his heirs, &c. by and with the advice of his or their Privy Council, during the continuance of ſuch calamity, to make ſuch orders and regulations concerning quarantine, and the prevention of infection, as ſhall be neceſſary for the ſafety and preſervation of his or their ſubjects, and to notify the ſame by proclamation; and all and every perſon or perſons, officer and officers, civil and military, whatſoever, ſhall render due and exact obedience to all ſuch orders and regulations ſo made and notified as aforeſaid.

II. And be it further enacted, That if any perſon infected with the plague, or obliged to perform quarantine, ſhall wilfully refuſe or neglect to repair, within convenient time, after due notice for that purpoſe given to him, her, or them, by the proper officer, to the ſhip, houſe, lazaretto, or other place duly appointed for him, her, or them; or having been placed in ſuch ſhip, houſe, lazaretto, or other place, ſhall eſcape, or attempt to eſcape out of the ſame, while he, ſhe, or they ſhall continue infected, or before quarantine fully performed reſpectively, it ſhall and may be lawful to and for the watchmen, and other perſons, appointed to ſee quarantine performed, by any kind of violence that the caſe ſhall require, to compel every ſuch perſon ſo refuſing or neglecting as aforeſaid, and every ſuch perſon ſo eſcaping, or attempting to eſcape, as aforeſaid, to repair and return into ſuch ſhip, &c. ſo appointed for him, or her, as aforeſaid, and every ſuch perſon ſo refuſing or neglecting to repair, within convenient time after ſuch notice as aforeſaid, into ſuch ſhip, &c. appointed for him, or her, as aforeſaid; and alſo every perſon actually eſcaping as aforeſaid, ſhall be adjudged guilty of felony, and ſhall ſuffer death as a felon, without benefit of clergy.

III. And be it further enacted, That if any perſon not infected, nor liable to perform quarantine, ſhall preſume to enter any ſhip, &c. &c. as aforeſaid, while any perſon or perſons ſo

infected,

infected, or being under quarantine, ſhall be therein, and ſhall return, or attempt to return from thence, unleſs in ſuch caſes, and by ſuch proper licence, as ſhall be directed or permitted by ſuch order or orders, made, or to be made, and notified as aforeſaid; it ſhall and may be lawful to and for the watchmen, or other perſons, appointed to guard or ſecure ſuch ſhip, &c. &c. as aforeſaid, by any kind of violence that the caſe ſhall require, to compel ſuch perſon ſo returning, or attempting to return, to repair into ſome ſhip, &c. &c. ſo appointed as aforeſaid, there to continue and perform quarantine; and in caſe ſuch perſon ſhall actually eſcape out of ſuch ſhip, &c. &c. where he, or ſhe, ſhall be ſo placed for performance of quarantine, before he, or ſhe ſhall have fully performed the ſame, he, or ſhe, ſhall be judged guilty of felony, and ſhall ſuffer death as a felon, without benefit of clergy. CHAP. I.

IV. And be it further enacted, That if at any time or times hereafter, any city, town, or place within Great Britain or Ireland, &c. ſhall be infected with the plague, it ſhall and may be lawful to and for his Majeſty, his heirs and ſucceſſors, to cauſe one or more line or lines, trench or trenches, to be caſt up or made about ſuch infected city, town, or place, at a convenient diſtance from the ſame, in order to cut off the communication between ſuch infected city, town, or place, and the reſt of the country; and to prohibit all perſons, goods, and merchandiſes whatſoever, to enter, paſs, or be carried over ſuch lines or trenches, unleſs in ſuch caſes, and by ſuch proper licence, and ſubject to ſuch regulations and reſtrictions for performance of quarantine, as ſhall be directed or permitted by any ſuch order or orders, made or to be made, and notified as aforeſaid; and in caſe any perſon or perſons, being within ſuch lines or trenches, or any of them, ſhall, during the time of ſuch infection, preſume or attempt to come out of the ſame, unleſs in ſuch caſes, and by ſuch proper licence, and ſubject to ſuch regulations and reſtrictions for performance of quarantine, as ſhall be directed or permitted

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mitted by ſuch order or orders, made or to be made, and notified as aforeſaid, it ſhall and may be lawful to and for the watchmen, or perſons appointed to guard or ſecure ſuch lines or trenches, or any of them, by any kind of violence that the caſe ſhall require, to compel all and every ſuch perſon or perſons to return back within ſuch lines or trenches; and in caſe any perſon ſhall actually come out of ſuch lines or trenches, or any of them, unleſs in ſuch caſes, and by ſuch proper licence, and ſubject to ſuch regulations and reſtrictions as aforeſaid, every ſuch perſon ſhall be adjudged guilty of felony, and ſuffer death as a felon, without benefit of clergy.

Here follows the Proteſt of the Lords in the month of December, 1721.

A motion was made, the 13th of December, in the Houſe of Lords, and the queſtion being put, that a bill be brought in for the repeal of ſo much of the act paſſed laſt year relating to the plague, as gives a power to remove to a Lazaretto, or peſt-houſe, any perſons whatſoever infected with the plague, or healthy perſons out of an infected family, from their habitations (though diſtant from any other dwelling-houſe). And alſo ſo much of the ſaid act, as gives power for the drawing lines or trenches round any city, town, or place infected; it was reſolved in the negative.

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Diſſentient.

I. Becauſe the powers ſpecified in the queſtion, ſeem to us, ſuch as can never wiſely or uſefully be put in execution. For by the firſt of them, perſons of what rank or condition ſoever, either actually infected, or being in the ſame habitation, though in lone-houſes, where they are well accommodated, and from whence there

there is no danger of propagating the infection, may be forcibly removed into common Lazarettos or peſt-houſes. And it does not appear to us, that ſuch a power could at any time be reaſonably executed, and therefore we conceive it ſhould be repealed.

The other power extends to the drawing of lines around any city, town, or place, and conſequently around the cities of London and Weſtminſter; the very apprehenſions of which, upon the leaſt rumour of a plague, would diſperſe the rich, and by that means (as well as by hindering the free acceſs of proviſions) ſtarve the poor, ruin trade, and deſtroy all the remains of private and public credit.

II. Becauſe ſuch powers as theſe are utterly unknown to our conſtitution, and repugnant, we conceive, to the lenity of our mild and free government; a tender regard to which was ſhewn by the act Jac. I, which took care only to confine infected perſons within their own houſes, and to ſupport them under that confinement, and lodged the execution of ſuch power ſolely in the civil magiſtrate; whereas the powers by us excepted againſt, as they are of a more extraordinary kind, ſo they will probably (and ſome of them muſt neceſſarily) be executed by military force; and the violent and inhuman methods which on theſe occaſions may, as we apprehend, be practiſed, will, we fear, rather draw down the infliction of a new judgment from Heaven, than contribute any ways to remove that which ſhall then have befallen us.

III. Becauſe we take it, theſe methods were copied from France, a kingdom whoſe pattern, in ſuch caſes, Great Britain ſhould not follow; the government there being conducted by arbitrary power, and ſupported by ſtanding armies; and, to ſuch a country, ſuch methods do, in our opinion, ſeem moſt ſuitable: and yet, even in that kingdom, the powers thus exerciſed of late, have been

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been as unſucceſsful, as they were unprecedented; ſo that no neighbouring ſtate has any encouragement from thence to follow ſo fatal an example. In the laſt plague with which we were viſited, Anno Dom. 1665, though none of theſe methods were made uſe of, much leſs authoriſed by Parliament, yet the infection, however great, was kept from ſpreading itſelf into the remote parts of the kingdom; nor did the city of London, where it firſt appeared, and chiefly raged, ſuffer ſo long, or ſo much, in proportion to the number of its inhabitants, as other cities and towns in France have ſuffered, where theſe cruel experiments have been tried.

IV. Becauſe, had ſuch part of the act, as we think ſhould be repealed, been accordingly repealed, there would ſtill have remained in it a general clauſe, which gives the crown all powers neceſſary to prevent the ſpreading of infection; and conſequently, theſe very powers among the reſt, if they ſhould be found neceſſary: and therefore there is no need we conceive, to have them expreſsly granted in the ſame act of parliament, which ſeems not only to warrant, but, in a particular manner, to preſcribe and direct the uſe of them.

V. Becauſe the great argument urged for continuing theſe powers ſpecified in the queſtion (that they would probably never be put in execution in the caſes objected to) ſeems to us a clear reaſon, why they ſhould not be continued; for we cannot imagine why they ſhould ſtand enacted, unleſs they are intended to be executed; or of what uſe it will be to the public, to keep the minds of the people perpetually alarmed, with thoſe apprehenſions under which they now labour, as appears by the petition from the city of London, lately rejected. It may be an inſtance of our great confidence in his Majeſty's wiſdom and goodneſs, when we truſt him with ſuch powers unknown to the conſtitution; but we think it ill becomes us to repoſe ſuch truſt, when it tends, in our opinion, rather to render him terrible, than

than amiable to his ſubjects; and when the only advantage he can (as we conceive) draw from the truſt repoſed in him, is not to make uſe of it,

The arguments produced in the above Proteſt of the Lords, may be preſumed to have been among the ſtrongeſt that were employed againſt the objectionable clauſes of the act. They are highly deſerving of attention, and, may ſuggeſt amendments in framing any future act. I ſhall, in the mean while, with due ſubmiſſion, offer a few remarks on the objections made by their Lordſhips.

The conſtruction of that clauſe of the act, in the firſt article of the Proteſt, relative to lone-houſes, ſeems to be overſtrained, and the objection might be removed by an explanation.

The ſecond article of the Proteſt, mentions the comparative lenity of the ſtatute of James the Firſt, which only took care to confine infected perſons within their own houſes, and to ſupport them in that confinement. But the Proteſt omits to mention, that perſons not infected were, by the ſame ſtatute, confined in the ſame dwelling with thoſe ſick of the plague.

The remark, that the execution of the powers given by James the Firſt, were lodged ſolely in the civil magiſtrate, is juſt; and perhaps ſimilar powers ought never to be lodged any where elſe. But in the act objected to, there is no direct mention of military force; and even the watching the propoſed lines and trenches, is expreſsly committed to the civil magiſtrate.

The objections, in the third article of the Proteſt, are that the methods adopted in the act, were borrowed from France; that even there they had proved unſucceſsful; that no ſuch methods had been uſed in the laſt plague at London; that, nevertheleſs, the infection was kept from ſpreading into the remote parts

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parts of the kingdom; and that London did not ſuffer ſo much, in proportion, as the cities and towns in France.

To theſe it may be anſwered, that if the methods propoſed for preventing the infection from ſpreading, promiſe to be of ſervice, it ſeems very immaterial from what country they were borrowed. That the government in France was conducted by arbitrary power, might be true; and it was the buſineſs of the legiſlature in Britain, in framing the act, to guard the execution of it, agreeably to the principles of a free government. But, under proper and expreſs limitations, the Britiſh conſtitution, ſeemed to be no more affected by the clauſes in queſtion, than it is by the preſent quarantine laws, in reſpect to ſhips, moſt of which laws were borrowed from arbitrary governments. The influence of theſe clauſes was indeed more extenſive, as the object in view was of more general importance to the kingdom, but the principle, in reſpect to the Britiſh conſtitution, would appear to be the ſame, in both caſes.

If the methods purſued in France, had been always found ineffectual, it would have been a good reaſon for rejecting them. That they ſometimes failed, muſt be allowed; but if the French Memoirs, which had not at that time been publiſhed, may be truſted, the methods recommended, though not infallible, had often proved of great ſervice.

What is aſſerted of London, in 1665, ſeems to have been hazarded upon too ſlight information. A ſeparation of the ſound from the infected, was recommended, and often practiſed; and if the remote parts of the kingdom eſcaped, without uſing any precautions, it may be aſcribed to their diſtance, and the want of communication with infected places.

If London ſuffered leſs than ſome of the French towns, it would be ſtrange to aſcribe the difference to the latter having

ſed means of preventing communication, and the former not. But concluſions, from the different degrees in which the plague rages, muſt be cautiouſly drawn; becauſe remarkable difference in the ſpread of infection, at different periods, has been before ſhown, in reſpect to London, and ſtill more particularly at Aleppo, where nothing could be attributed to variation in the police. CHAP. I.

In the fourth article of the Proteſt, their Lordſhips admit, that the very powers they object to were already given, by the general clauſe, which gives the crown all powers neceſſary to prevent the ſpreading of infection; and therefore, there was no need to have them expreſsly granted in the ſame act, which ſeems not 'only to warrant, but to direct the uſe of them.'

Might it not be aſked here, whether the apprehenſions of the people were not likely to be more alarmed, by the unknown and undefined powers granted to the crown, in the general clauſe, than when the powers granted were clearly expreſſed and explained, by the legiſlature? Or what ground for confidence muſt the ſubjects of a free government have, when powers are, by implication, conferred, in a public act, which the legiſlature ſeems afraid of acknowledging?

The neceſſary and extraordinary powers to be exerciſed, in the unhappy times of the peſtilence, ſeem to be the proper objects of parliamentary diſcuſſion. When duly limited and explained by the legiſlature, they would be received with reſpectful ſubmiſſion. But implicit reliance on ſuch undefined orders as a Privy Council might, at any future time, judge fit to iſſue, in a matter ſo univerſally intereſting to domeſtic quiet, was not to be expected of Britiſh ſubjects; it was an exceſs of confidence which they hardly would repoſe in any Council whatever, were it even to be compoſed of archangels.

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When there is no preconcerted plan of operation, for the purpoſes of the powers intruſted to the Council, there is little reaſon to expect that well digeſted orders will be iſſued, under the urgency of immediate danger. If a plan be concerted, no reaſon appears why the principal parts of it, ſhould not be avowed, and publicly receive the expreſs ſanction of the legiſlature, while inferior details are left to the diſcretion of the Council of Health.

That to hinder promiſcuous intercourſe, and to ſeparate the ſound from the infected, are the moſt probable means, yet known, of preventing the plague from ſpreading, are propoſitions that will hardly be controverted. Opinions may differ concerning the methods by which the objects in view are moſt likely to be attained, but all will agree, that the moſt gentle, and leaſt oppreſſive to the ſubjects, for whoſe benefit they are intended, if equally effectual, ought undoubtedly to have the preference. To remove immediately the infected families, placing the ſick in proper infirmaries, according to their ranks, and the ſound in Lazarettos, prepared for the performance of a ſhort quarantine, while their own houſes ſhould be purified, to receive them on their return, is one of the general methods propoſed. This, in a free and diſpaſſionate diſcuſſion, would be variouſly modified, and improved. The united wiſdom of the Senate, would add ſuch reſtrictions and conditions, to the principal points, as might ſerve to reconcile the minds of men to powers which, on a firſt view, appear dangerous, and to regulations that ſeem harſh and oppreſſive.

The execution of the meaſures judged moſt expedient, thus limited and explained, would be intruſted to the civil magiſtrate, and the municipal officers, under the direction of the Council of Health, of which the diſcretionary power, is ſuppoſed reſtricted to matters not detailed in the ſtatute. It may, perhaps, be the readieſt way to prevent groundleſs fears and jealouſies, raiſed by new or extraordinary powers given to government, 'that it

'appear they are not only warranted, but the uſe of them par- CHAP.
'ticularly preſcribed and directed by the legiſlature.' I.

In the mean while, the ſtatute of James the Firſt remains in force, and comprehends almoſt the only parliamentary directions for the internal government of places actually infected. The Quarantine Act of George the Second, now in force, empowers his Majeſty, when the plague is in Britain, to prohibit ſmall boats and veſſels, under the burthen of 20 tons, from ſailing out of any Britiſh port, except under certain conditions. This ſeems to be the only clauſe applicable to ſuch times. The others relate to the quarantine of ſhips, merchandiſe, or perſons, coming from infected places, or from any place whence it may be judged probable that the infection may be brought. In reſpect to all theſe, they are explicitly made ſubject to ſuch orders, rules, and directions, concerning quarantine, and the prevention of infection, as have been, or ſhall be made by his Majeſty. How far this power, over all *perſons obliged to perform quarantine*, may be extended, ſo as to comprehend infected perſons in private houſes, and compel them to repair to a Lazaretto, is a point of law not for me to decide. If under the words, *Prevention of Infection*, ſuch power be intentionally couched, the fourth clauſe of George the Firſt's act, expreſsly empowering government to act, in times of peſtilence, ſeems much preferable to the indirect implication, if ſuch exiſts, employed in the preſent Quarantine Act. And it may be further remarked, that, expreſs as the general clauſe was, in the act of 1720, it was neceſſary, in the opinion of the Attorney General and Solicitor General, who drew up the bill, to ſpecify, in ſeparate clauſes, the powers to which the proteſting Lords objected, though, in the opinion of their Lordſhips, thoſe powers were ſufficiently implied before, in the general clauſe.

But, however it may be doubted, whether an infected family can be removed from their houſe, by virtue of the preſent Quarantine Act, there appears no doubt that, agreeably to the ſtatute

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of James the Firſt, the ſame family might, by the civil magiſtrate, be confined to their houſe, by compulſion, and under heavy penalties. The ſeparation of the family, under ſuch calamitous circumſtances, by which a part may probably be preſerved, appears a tender meaſure, compared to that of ſhutting up the infected and the ſound together, in the ſame houſe, however well the unhappy priſoners may be ſupplied with the neceſſaries of life. Imagination recoils, with horror, from the varied ſcenes of diſtreſs reſerved for ſuch a dreadful impriſonment[41]; and one cannot avoid wondering, that in the year 1720, ſo little notice was taken of a law, at leaſt equally inconſiſtent with the Britiſh conſtitution, and leſs conducive to the ſafety of the ſubject, than the repealed clauſes of the act of George the Firſt.

An account of the ſtatute of James the Firſt, and more particularly of the clauſes in queſtion, has been already given. The other clauſes relate chiefly to the infected poor, and enable the civil magiſtrate to lay taxes on the inhabitants, houſes, lands, &c. proportionate to the neceſſities of the diſtrict, for the relief of the poor. It being neceſſary that "they be by ſome charitable courſe "provided for, leſt they ſhould wander abroad, and thereby in-"fect others."

By another clauſe, the civil magiſtrates are alſo empowered "to appoint within their ſeveral limits, ſearchers, watchmen, "examiners, keepers, and buriers, for the perſons and places re-"ſpectively infected. And to miniſter unto them oaths for the "performance of their offices, and give them other directions, "as unto them for the preſent neceſſity ſhall ſeem good in their "diſcretions."

So far the legiſlature has interfered in ſettling two material articles of the police. The mode of confining infected perſons in

[41] Journal of the Plague Year, p. 45. 57. Lond. 1722. The Shutting up of Houſes ſoberly debated. Lond. 1765.

their

their houſes, certainly requires amendment; and perhaps ſeveral articles might be ſelected from the old orders, iſſued in 1603, which, with a few alterations, might be inſerted with advantage into any new act, that the legiſlature, in its wiſdom may think fit to frame, at any future time. CHAP. I.

Having premiſed theſe remarks, on the orders againſt the infection of the plague, iſſued in former times; on the acts of parliament made in 1604, and 1720; and on the ſecond chapter of Doctor Mead's Diſcourſe; I now proceed to the conſideration of the police, in times of peſtilence, as it relates to the four different ſtages of the plague; that is to ſay, to its beginning, its increaſe, its decreaſe, and its termination. Of theſe four, the firſt and the third ſtages, ſometimes afford an opportunity of attempting the extinction of the diſeaſe, and, conſequently, of averting a long train of evils, which, when that opportunity is once neglected, elude all the after vigilance of the magiſtrate.

CHAP. II.

Regulations in the beginning of the plague—Diſſent of phyſicians not to be regarded—Obſtinacy of the phyſicians, at Meſſina—The diſtemper ſhould not be concealed by the police—A general quarantine propoſed for extinguiſhing the plague, at the beginning—Some of the old orders ſhould be revived—The great hoſpitals ſhould be ſhut up—Various preparatory arrangements.

THE plague, in the beginning, ſeldom ſhows itſelf in more than one diſtrict, perhaps in one ſtreet only at the ſame time, and its progreſs, in general, is ſo ſlow, and ſo little alarming, that, in populous cities, it may remain ſeveral weeks, among the lower claſs of people, unnoticed or unknown.

The

The procuring the moſt early intelligence of the diſtemper; the immediate ſeparation of the ſound from the infected; the ſecuring the furniture of infected houſes; and the temporary ſecluſion of perſons who may have, unwittingly or otherwiſe, had intercourſe with the ſick, or their family; are the principal objects which the police ought to have in view, at this period.

In ſuſpicious times, that is, when the plague rages in the neighbouring ſtates, and has appeared in the Lazaretto, or in ſhips from infected places, the diſcovery of the ſickneſs in the city ſhould be encouraged, by a public reward[1]; and medical perſons, of every denomination, ſhould be required, by authority, to give information of any ſuſpicious caſes which they may happen to meet with, in the courſe of their practice.

Female ſearchers, who, when requiſite, were aſſiſted by ſurgeons, were formerly appointed in every pariſh, in conſequence of the orders againſt infection publiſhed by James I; and in 1665, the College of Phyſicians, very properly inſerted a new article, in their public advice, containing inſtructions to the ſearchers. In this there is a good deſcription of the peſtilential eruptions, and, where ſuch are found, there can be no doubt of the nature of the diſeaſe; but it ſhould always be remembered, that perſons often die, eſpecially in the beginning of the peſtilential ſeaſon, without any viſible external marks upon the body, and therefore, the abſence of theſe is no proof of the diſtemper not being the plague: moreover, it often happens that thoſe employed about the ſick, at this time, eſcape unhurt, as if the diſeaſe were not contagious.

Theſe two circumſtances cannot be too often repeated, becauſe a want of attention to them has, in every country, proved the ſource of fatal errors. It is alſo to be wiſhed, that the College,

[1] Mead, p. 100.

in

in their future advice, would inſert a ſhort enumeration of the moſt ſuſpicious peſtilential ſymptoms, as an additional article of inſtruction to the ſearchers, when called upon to viſit, in conſequence of the order of the mayor, entitled, "Notice to be given "of the ſickneſs;" by which the maſter of every houſe is required to give information, within two hours, not only upon diſcovery of external eruptions, but likewiſe "where a perſon falls dan-"gerouſly ſick, without apparent cauſe of ſome other diſeaſe." CHAP. II.

Perhaps no inſtructions whatever would lead to certainty, in this caſe, but it would be ſufficient if they pointed out circumſtances juſtly ſuſpicious. In the ſmall-pox, in the beginning of the ſeaſon, before they have become epidemical, the moſt experienced phyſician, in any particular caſe, would hardly hazard a deciſive opinion, before eruption. The difficulty is ſtill greater in the plague, where the ſymptoms are more obſcure, and where perſons in imminent danger, ſometimes appear to be but ſlightly diſordered. But in ſuſpicious times, anomalous ſymptoms, and unexpected death, after a ſhort illneſs, ought to give alarm; for it greatly imports the public ſafety, that ſuch ambiguous caſes ſhould be conſidered as peſtilential. Where the diſtemper has, in one or two inſtances, been aſcertained by the appearance of buboes or carbuncles, all further heſitation ſhould be at an end; and ſuch caſes, as might before have been reckoned ambiguous ſhould, without further conteſt, be deemed the plague.

This is founded on that important maxim, which the experience of Ferrara ſhowed to be ſo neceſſary and beneficial, in the year 1630, namely, "After the firſt accident was aſcertained, to ſet "down every ſudden attack of illneſs for the plague, whether "clearly denoted by the ſymptoms or not, and to take meaſures "accordingly[z]."

Doctor

[z] Muratori Governo Politico, lib. i. cap. v. "Dopo il primo caſo, ſi ſtabili, & "fu conoſciuta neceſſaria, non che utilliſſima, quella gran maſſima di ſempre inter-"pretare

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Doctor Mead has taken notice of the ſucceſs attending the conduct of the magiſtrates of health, at Ferrara, on this occaſion, and has cited, from their Memoirs, a declaration intended for the inſtruction of poſterity, "that the only remedy againſt "the plague is to make the moſt early diſcovery of it "that is poſſible, and thus to extinguiſh it in the very be-"ginning[3]." But, I apprehend, he has inadvertently omitted what ſtands in the original, and is of material conſequence, namely, "to hold every accident for the plague, which admitted "of ſuſpicion[4]." The magiſtrates of Ferrara did not merely endeavour to procure early intelligence, but as ſoon as an accident came to their knowledge, although the caſe was only ſuſpicious, they proclaimed it to be the true plague, by tranſporting the inhabitants of the houſe to the Lazaretto, at noon-day; contrary to the conduct purſued at Verona, Milan, and other towns, where they took great pains to conceal the diſtemper, as long as they could, from an apprehenſion of loſing their commerce by a diſcovery; and where they paſſed that time in diſputation, on the nature of the malady[5], which ought to have been employed in taking the neceſſary precautions for the public ſafety.

"pretare per peſte ogni accidente, indicante indifferentemente peſte, e non peſte;
"e quantunque alcune volte (furono nondimeno eſſe ben poche) forſe non ſi accer-
"taſſe iyi nel giudicare, tuttavia ſi accertò ſempre in aſſicurar la patria."

[3] Mead, p. 102.

[4] Muratori Governo Politico, p. 39.
"In ſomma ebbero, ſecondo me, ragione i Ferrareſi di conchiudere nelle loro
"memorie, poter' eglino certificare agli altri, che il pubblicare prontamente il male,
"e il *tenere per contagioſo ogni caſo, che ſia capace di ſoſpetto*, è l'unico remedio all'
"eſtinzione del medeſimo male."

The people of Ferrara had, in my opinion, reaſon to inſert in their public Memoirs, for the inſtruction of other ſtates, that an early diſcovery of the diſeaſe, and to conclude every accident, which admitted of ſuſpicion, to be peſtilential, were the only means to extinguiſh the plague.

[5] Muratori Governo Politico, p. 38.

The

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The exemplary conduct of the magiſtrates of Ferrara, is the more deſerving of attention, becauſe the contrary practice has been found, by repeated experience, to be attended with the moſt fatal conſequences. To the inſtances produced in proof of this by Muratori, at Venice, in 1576; at Florence, in 1630; at Malta, in 1675; and at Vienna, in 1713[6], may be added that of Marſeilles, in 1720; and that of Meſſina, in 1743. The obſtinacy of the ſurgeon of the Lazaretto at Marſeilles[7]; the diſſent of the phyſicians[8]; and the unfortunate meaſure, adopted by the magiſtrates, of deceiving the public, by a ſolemn declaration, that the reigning diſtemper was not the plague[9], in ſo far as they cauſed a relaxation in the requiſite precautions, and countenanced an unguarded intercourſe, were productive of conſequences which ought to prove a ſtanding warning to poſterity. I have before had occaſion to make ſome remarks on this head, and for the reſt ſhall refer to the Journal of the Plague at Marſeilles, and the Relation Hiſtorique; but I cannot paſs over the more recent example of Meſſina. In that plague it appears, that after the death of the maſter and one of the mariners of the ſhip, which brought the infection from the Morea, in the latter end of March, the ſhip and cargo were deſtroyed, and the remaining crew were put under a rigorous quarantine. That no other accidents intervening, the firſt alarm ſubſided, the people reſumed confidence, as if all had been over, and the 15th of May was appointed for the celebration of a Te Deum, in the cathedral. That the ceremony was interrupted, after the people were aſſembled, by a phyſician, who declared he had reaſon for thinking the plague was actually in the place. A declaration which endangered his own life, it being with difficulty he made his eſcape from the fury of the populace; and though from that period to the end of the month between three and four hundred periſhed, of a diſtemper which he continued to affirm was the genuine plague;

[6] Muratori Governo Politico, p. 37.
[7] Relat. Hiſtor. p. 35.
[8] Ibid. p. 41. 45. 47.
[9] Relat. Hiſtor. p. 55. 112.

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no precautions were taken. He perſiſted ſingly in his opinion againſt the reſt of the faculty, who, in ſpite of unequivocal ſymptoms, contended it was only an ordinary epidemic diſtemper. On the 31ſt of May an aſſembly of thirty-three phyſicians concurred in a formal atteſtation, of its not being the plague. Laſtly, that the funerals ſoon increaſing to one hundred, daily, government, at length, but too late, took the alarm, and dreadful ſcenes of unparalleled anarchy followed [10].

This

[10] In a former note, page 327, I gave an account of the introduction of the plague at Meſſina, extracted from a private letter of a gentleman, who at the time was reſident there. The letter proceeds thus. "The Padrone's death, on the 24th of "March, gave the firſt alarm, but being followed, on the 27th, by one of the ſailors "with all the ſymptoms of a peſtilential diſtemper, the conſternation was general; "whereupon it was determined, in a public council, that the landed goods at the Lazaretto, together with the veſſel, ſhould be immediately burnt, and that the remaining crew ſhould be confined in the propereſt part of the Lazaretto, under a ſtrong "guard. All which was punctually performed, and with the moſt rigorous precautions, by the intervention of the principal nobility.

"This contributed to calm the minds and the apprehenſions of the people, and "as the remaining crew continued to enjoy perfect health, the tranquillity ſoon "became general, ſo that after the expiration of forty days, the archbiſhop was "appointed, on the 15th of May, to aſſiſt at the *Te Deum* in the cathedral, in "thankſgiving for the happy deliverance, from the moſt terrible of all the Divine "judgments. But no ſooner was the church full, and the ſenators arrived at their "ſeats, than a phyſician accoſted them with the dreadful notice that ſome of his "patients had diſcovered ſymptoms too much reſembling the plague; adviſing them "to poſtpone the thankſgiving, till they ſhould be convinced his apprehenſions were "groundleſs. This being ſpread about in the church, ſo great was the infatuation "of the people, it was with great difficulty he could retire, and ſeek an aſylum in "a convent, to avoid the fury of the populace, who would have ſacrificed him for "having, in their opinions, attempted to defame the city.

"Too ſoon, however, it was viſible that this phyſician had repreſented the "truth, which he continued to aſſert againſt the reſt of the whole body of phyſi-"cians, who were of contrary ſentiments, and too obſtinately perſevered in them; "ſo that the diſtemper, which began, at that time, by ſlow degrees to manifeſt itſelf, "was only conſidered as epidemical, and as a continuance of the intemperature of "the air, that had, in reality, occaſioned certain epidemical, and even mortal diſ-

This infatuation of the Meſſineſe exceeds even that of the people of Marſeilles, and might ſeem an exaggeration, did not the hiſtory of almoſt every plague furniſh examples of a kind ſomewhat ſimilar. Muratori has collected ſeveral others; he obſerves, CHAP. II.

" orders, during all the preceding winter, in many parts of Italy, and Sicily, which " circumſtance, together with the natural love of their country, the horror attend- " ing only the name of a plague, the good opinion they entertained of their Laza- " retto, and of the honourable proceedings of their magiſtrates, contributed to for- " tify their firſt notions of its being only a common diſtemper; and ſo much the " more, as for many days it *was not diſcovered to communicate to thoſe who attended* " *the ſick, either in their own houſes or in the hoſpitals*; and moreover, that the women " were, in a manner, ſolely attacked.

" Theſe united circumſtances aſſiſted to eſtabliſh this falſe miſtaken opinion, and " might indeed have been in ſome meaſure plauſible, had it not been for the certain " knowledge of the plague's actual exiſtence, ſo ſhort a while before, in their Laza- " retto ſo near the city, a circumſtance alone ſufficient, on the very firſt ſymptoms " to make them perceive their error; and ſuch a general firm perſuaſion of its not " being peſtilential, will appear very difficult to be conceived. But it ought not to " be thought impoſſible by thoſe who reflect, that when God Almighty thinks proper " to ſcourge a people with the moſt terrible of his judgments, the councils of the " rulers are confounded, and thoſe who are choſen to watch for the public good, " operating ſolely with human judgment, too often err, deceiving themſelves and " their country. Such was the unhappy fate of the Meſſineſe; yet they were ſen- " ſible of the judgment of heaven againſt them, and attempted to appeaſe the Divine " wrath, by their religious ceremonies, making continual proceſſions for ſeveral " days together, at which all ſorts of people aſſiſting, and particularly, as is very " natural, thoſe who were infirm, the poiſon that in the beginning had appeared " ſo mild, not only gathered ſtrength by ſuch frequent communications, but dilated " itſelf into every part of the city, till, at laſt, it broke out as a general conflagra- " tion of combuſtible matter or wild-fire.

" From the 15th to the 31ſt of May, between three and four hundred people of the " lower rank periſhed, attended by the phyſicians, who were eye-witneſſes of the " ſymptoms, and yet perſevered in their firſt obſtinacy, to ſuch a degree, that in a " council held at the governor's palace, on the 31ſt of May, no leſs than thirty- " three phyſicians made a formal atteſtation, that it was not the plague. However, " in the beginning of June, the mortality increaſing to upwards of one hundred in " a day, the government determined to take the ſame precautions as are uſually ob- " ſerved in a plague, and conſequently iſſued out public proclamations for the ne- " ceſſary regulations, in ſuch a conjuncture, when a panic terror ſeized at once

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obſerves, might have been given, from the hiſtory of times paſt, and he makes no doubt, as human nature is always the ſame, that future times will produce more. It is better, continues he, to be deceived in deeming that to be a plague, which is not, and to make timely proviſion againſt it, than to neglect precautions becauſe they may happen to prove unneceſſary, and to procraſtinate defence, till the nature of the diſtemper be determined with the nice preciſion of a philoſopher [11].

" the people, and the city was in a manner abandoned, except by the magiſtrates " of the health and ſenate, who kept firm in diſcharge of their duty, and only one " of each magiſtracy ſurvived. But none of theſe orders were executed, the common " people could not be kept under any government, ſo that many who had ſhut " themſelves up in their houſes, began to think of providing themſelves by force " of money, not only with the common neceſſaries for their ſuſtenance, as flour, " rice, oil, &c. but alſo fire-arms and powder, to be able to make defence againſt " the fury of the populace, who would aſſuredly have committed open violence, " had they not periſhed ſo very ſuddenly by the diſtemper, which ſwept away the " greater part in a very few days.

" The principal mortality did not continue above twenty days, that is, from the " 12th of June to the beginning of July, when it ceaſed in a manner all at once; " occaſioned probably from their being no more matter for the poiſon to work upon. " Since, at that time, there only remained thoſe who were carefully ſhut up, or " thoſe who were recovered. The ſurviving being no more ſufficient to make pits " for burying the dead, the only method left was to burn them, and, at the latter " end of June, the governor permitted about ſixty ſoldiers, covered with pitched " canvas, and armed with a long pole with an iron hook, to collect together all " the dead bodies, as well thoſe in the ſtreets, as thoſe who had remained in the " houſes, when, in ſeveral parts of the city, they were burnt promiſcuouſly, men " and women, rich and poor; which, for many ſucceſſive days, cauſed a ſtench that " cannot be deſcribed, or conceived."

[11] " Altri eſempi ce ne ſono ſtati; ma pur troppo ce ne darà degli altri il tempo " avvenire, perche le teſte umane ſaran quelle di ſempre. Meglio è in tali caſi in- " gannarſi col prendere per effetivo contagio quello che non è, e provvedere per " tempo, benche ſenza biſogno, che il traſcurare gli opportuni ripari, per volerla far " da accurato filoſofo nel riconoſcere la vera eſſenza, e la qualita del malè." Muratori, p. 37.

Muratori's

Muratori's prediction has already been fulfilled at Marſeilles, and at Meſſina, and in this caſe, perhaps no warning will ever prevail over the popular propenſity to ſelf-deluſion. But the Council of Health, ſuperior to the prejudices and clamour of the multitude, whilſt it leaves no means untried to obtain the earlieſt intelligence, ought ſteadily to purſue ſuch meaſures as it may approve, without much regard to the diſcordant opinions of phyſicians, the abſence of eruptions, and the inſtances of thoſe about the ſick eſcaping infection. In times of danger, when it is impoſſible to arrive at certainty, the public ſafety juſtifies the proceeding on ſuſpicion; the inconveniency of a few individuals ought not to ſtand in competition with the general welfare, and every hour's delay, upon one ſuppoſition, leads to irreparable evils.

When the perſons removed on ſuſpicion prove to be infected, and, notwithſtanding the above early precautions, the contagion is found to ſpread in their ſtreet, or the adjoining ſtreets; the public ſhould be warned of their danger, that they may avoid communication, and the infected diſtrict ſhould be laid under more rigorous reſtraint.

That is to ſay, no perſons, without leave previouſly obtained, ſhould be permitted to enter or go out of the bounds publickly preſcribed by the magiſtrate.

All perſons, within theſe bounds, ſhould be enjoined to keep within doors, as much as poſſible; and due care muſt be taken to ſupply them with the neceſſaries of life, under the direction of civil officers: the poor ſhould be ſupplied at the public expence.

Thoſe who can conveniently retire into the country, may obtain permiſſion of the magiſtrate, together with a certificate of health, without which no one whatever ſhould be permitted to paſs. The certificates ſhould be delivered gratis. The encouraging people to leave the town, is very properly recommended by

Doctor

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Doctor Mead[12]; but after the plague has made ſome progreſs, perſons retiring from an infected place ſhould be obliged to perform a ſhort quarantine.

Such as have no known retreat of their own in the country, muſt ſpecify the place whither they intend to fly, and obtain a paſs for that particular place: otherwiſe they ſhould be ſubject to impediments on the road. But permiſſion ſhould cautiouſly be granted for families to remove to other pariſhes of the ſame town, unleſs into empty houſes; becauſe it would only relieve one part at the expence of another; while the main object is to thin the town, and to prevent the contagion ſpreading to different quarters, or to the adjacent country, by means of the fugitives.

Thoſe who, from their condition in life, or other circumſtances, cannot leave the place, ſhould be ſtrictly enjoined, for their own ſakes, to ſequeſter themſelves in their own houſes, avoiding all unneceſſary communication with perſons without doors. The lower claſſes, who are maintained at the public expence, ſhould be compelled to this ſequeſtration; and, beſides the ordinary watch in the night, a number of extraordinary watchmen ſhould be appointed, to ſee the orders of the Council of Health carried into execution.

It is at this period, before the diſtemper has ſpread too far, that the attempt to extinguiſh it, by laying the infected diſtrict under a general quarantine, is likely to be attended with ſucceſs. Muratori, on this head, refers to P. Maurizio da Tolone, who has treated on the ſubject. But Muratori, though he ſeems highly to approve the meaſure, expreſſes himſelf in a doubtful manner of its ſucceſs in the beginning of the plague, eſpecially

[12] Mead, p. 99.

in

in large towns[13], as if the inſtances he had met with of its good ſucceſs, had been only in the decline of the ſeaſon, when the change in the air may be ſuppoſed to have co-operated. CHAP. II.

The propoſal of Father Maurizio, was to the following purport[14]. After allowing a certain number of days for preparation, and for ſuch families, as were in a condition to retreat, to depart from the city, the lower claſs of inhabitants were to ſhut up in their own houſes, under pain of death; being provided with the neceſſaries of life at the public expence. Where the diſtemper had ſhown itſelf among the inhabitants of higher ranks, they were to be ſubject to the ſame law. The infected were to be immediately removed to a peſt-houſe, and the reſt of the family to a Lazaretto, from whence, after a quarantine, they were to return home, their houſes being previouſly fumigated.

This, where practicable, would certainly be the beſt means of putting a ſtop to that intercourſe, by which the infection is obviouſly ſpread. But in a large town, many obſtacles would ariſe to the carrying a meaſure, in appearance ſo harſh, into effectual execution, at a time when the popular apprehenſion runs ſo low, as it generally does in the infancy of the plague. This, however, is no objection in reſpect to ſmall places, or where the diſtemper is confined to one or two diſtricts, in a town. But in ſuch caſes, it ſeems reaſonable that no diſtinction of rank ſhould be made[15]; for though families of the better claſs may be leſs

[13] "Io, per me, non ſo preciſamente come rieſca, e foſſe per riuſcire in pra-
"tica, & maſſimamente in citta grandi, queſto remedio, che in teorica mi compariſce
"ſommamente utile, per non dire anche neceſſario." Muratori, p. 20.

For my part, I do not know preciſely the ſucceſs of the propoſed method, nor how it might turn out in practice, particularly in reſpect to large cities; but, in theory, it appears to me to be extremely uſeful, not to ſay neceſſary.

[14] Muratori, p. 18.

[15] "Ma ſe recordino bene tutti i principi, & magiſtrati, eſſere un punto di ſomma
"impor-

leſs liable to infection, at this time, than the populace, yet their dependants and domeſtick ſervants may have dangerous connections; and while they are permitted to walk about, or to attend their maſters to the country, there is a riſk of their ſpreading the contagion. Where therefore the extinction of the plague is the object in view, all perſons indiſcriminately ſhould be laid under the ſame reſtrictions. Some days muſt be allowed for preparation, not for flight, (except to ſuch as will perform a quarantine) and every poſſible means ſhould be employed, by the police, to render the general impriſonment as comfortable as poſſible.

I conceive it needleſs to enter into a detail of the method of performing the general quarantine, as it may be found in the Traité de la Peſte, particularly in a ſuccinct Memoir of M. Joſſaud, who writes from his experience at Arles[16]. I ſhall therefore diſmiſs the ſubject, with this remark, that as the meaſure has been actually carried into execution at Milan[17], and other places, in the decline of the plague, it is reaſonable to think it will be more practicable in the beginning, when it will be unneceſſary to extend the quarantine ſo widely; in the mean while, the object in view is infinitely more important in the beginning, as the meaſure, if vigorouſly and ſucceſsfully proſecuted, may obviate that devaſtation, againſt which, in the decline of the plague, it is recurred to, as the laſt of human remedies[18].

" importanza il non avere allora, ne laſciar avere partialità per alcuno - - - - Un ſolo " peccato d'indulgenza puo portare l'eccidiô a un pubblico tutto." Ibid. p. 18.

But princes and magiſtrates ſhould ever hold it in remembrance, as a matter of the utmoſt importance, that, at ſuch times, they ſhould neither themſelves indulge, nor permit in others, a partiality for any perſon whatſoever. A deviation from this rule, in a ſingle inſtance, may prove fatal to a whole people.

[16] Traité de la Peſte, p. ii. p. 148. 163.

[17] Muratori, p. 20.

[18] " Ma ſe in fine biſogna ridurſi alla quarantena, o ſia a tal rinſerramento, per ſal- " vare le reliquie del popolo, fin' allora preſervate dal comune incendio: quanto " piu

But if this meaſure, for whatever reaſons, be not adopted, it will then be neceſſary to proceed with the regulations already begun. CHAP. II.

While the infected diſtrict is employed in ſeparating the ſick from the ſound; preventing undue intercourſe; thinning the inhabitants; and purifying the houſes, for the reception of thoſe returning from quarantine; the other diſtricts ought to make arrangements for an event, which the public ſafety requires ſhould be conſidered as near at hand. They may perhaps eſcape altogether; but the police ſhould preſume they will not; and preparatory arrangements ought not be deferred till the danger approaches. In 1625, of a hundred and twenty-two pariſhes in London, one alone remained untouched[19].

It is now the time alſo, whilſt it may be done without endangering the reſt of the kingdom, to clear the city of the idle and vagabond; to ſuppreſs ſtreet beggars, and old clothes-men;

" piu gioverà e ſarà convenevole quando mai ſi poſſa, il tentare lo ſteſſo rimedio, e " ſcampo ſu i principi, per vedere di mettere in ſalvo la cittadinanza tutta?"

But, if in the decline of a plague, a quarantine, or the ſhutting up houſes, becomes a neceſſary meaſure, for the preſervation of the remainder of the people, who have, till then, eſcaped the common calamity: how much more reaſonable and beneficial muſt it be, wherever it is practicable, to try the ſame remedy, and defence, in the beginning, with a view to protect the whole inhabitants of the city?

It was remarked, by Orræus, in the late plague in Ruſſia, that, in ſeveral ſmall towns, the plague was effectually extinguiſhed, by the early exertions of the magiſtrates, but that the ſame meaſures did not ſucceed in large towns. " In civitatibus " vero majoribus, utpote Jaſſiæ, Kioviæ, Moſcuæ, precautionibus hiſce juſtiſſimis, " utut in infantia mali poſſibilibus, in effectum plenarium ducendis, multæ circum- " ſtantiæ remoras infeliciſſimas injecerant, quarum potiſſimas, privatum nempe " commodum tot prævalentium civium, a declaratione peſtis detrimentum capiens, " & incredulitam fere univerſalem, a ſumme culpabili conniventia medicorum & " chirurgorum, quamvis pauciorum ſuffultam, denominaſſe ſufficiat." Deſcript. Peſtis, p. 129.

[19] See Graunt.

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to remove all nuiſances; and ſtrictly to prohibit unneceſſary aſſemblies. For all which purpoſes, the orders formerly publiſhed by the mayor and aldermen of London, relative to theſe matters, as well as the advice given at different periods by the College of Phyſicians, may be conſulted, and revived with improvements.

The burying in churches ſhould be abſolutely prohibited, as alſo in ſmall church-yards ſurrounded with dwelling-houſes[20]. The dead ſhould be interred without the city, and as remote as poſſible at firſt, leaving the intermediate ſpaces for future occaſion, ſhould the mortality greatly increaſe; for it will be leſs inconvenient to tranſport the dead to a diſtance, at this time, than when the number comes to increaſe; tolling of bells, and all funeral pomp ſhould be aboliſhed, till better times.

The ſeveral hoſpitals, and poor-houſes, ſhould be particularly careful in the reception of objects of charity. It might, perhaps, be better, in ſuch times, to put a ſtop entirely to their reception; either providing a ſeparate acceſſory houſe, for ſudden caſualties, or treating the patients at their own houſes, by additional aſſiſtants. This precaution is the more neceſſary, becauſe, though the patients who preſent themſelves may have no ſuſpicious appearances, there is no anſwering for the ſtate of their families, or connexions; and the introduction of the plague to the common hoſpitals, has, in general, proved fatal to all the inhabitants.

[20] See, on this ſubject, a Tract, publiſhed at London, in 1721, entitled "Some "Cuſtoms conſidered, whether prejudicial to the health of the city."

"It is well known that ſeveral out pariſhes of this city and liberties are very "much ſtraitened for room to bury their dead; and that to remedy, in part, that "inconvenience, they dig in their church-yards, or other annexed burial places, "large holes or pits, in which they put many of the bodies of thoſe who are not "able to pay for better graves; and then thoſe pits or holes (called the Poor's Holes) "once opened, are not covered till filled with ſuch dead bodies; this is the caſe in "St. Martin's, St. James's, and St. Giles's in the Fields, and other places." p. 7. On the ſubject of burying in church vaults, p. 15.

Hoſpitals therefore ſhould be early ſhut up, and all communi- CHAP. II.
cation with perſons without, except under the uſual regulations of quarantine, ſhould be ſtrictly prevented. The Hotel Dieu, at Marſeilles, was preſerved for ſome time by means of proper precautions; but the diſeaſe being introduced by the imprudent admiſſion of a female patient, in Auguſt, the officers of the houſe, moſt of the patients, and three hundred and ſeventy foundlings, out of four hundred, periſhed miſerably[21]. The General Hoſpital de la Charité, which made eight hundred beds, was preſerved entirely, by being kept ſhut up[22]; but upon the patients being removed to another place, they caught the infection, on the road[23]. At Moſcow, in 1771, the Imperial Orphan Hoſpital, in which there were about one thouſand children, and four hundred adults, was preſerved all the time of that dreadful plague; ſeven or eight perſons only, within the boundary, having been infected, and thoſe had ſecretly broke quarantine[24].

To the above arrangement it may be added, that the other diſtricts of the town, whilſt yet ſound, ſhould prepare an infirmary for the ſick, another for the ſuſpected, a third for convaleſcents, and a Lazaretto for perſons in quarantine. A ſurgeon ſhould be nominated to aſſiſt the ſearchers, and, ſhould it become neceſſary, to attend the infected. Different midwives, for the ſound and the ſick, ſhould be ſecured in time. A number of nurſes ſhould be provided, from among the poor, to be ready when called upon; and an apothecary's ſhop, well ſtocked with a few requiſite drugs, ſhould be eſtabliſhed for the ſervice of the poor.

It may alſo deſerve conſideration, whether it might not be adviſable, for each pariſh, to enquire ſtrictly into the ſtate of

[21] Relat. Hiſtor. p. 106. See alſo before, p. 240.

[22] See Traité de la Peſte, p. i. p. 355. Journal of Marſeilles, p. 60. See alſo before, p. 252.

[23] Ibid. p. ii. p. 138.

[24] Merten's, p. 95.

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the houſes of the poor[25]; to cauſe them to be thoroughly cleanſed; to ſupply ſoap and water and fire, for waſhing their clothes; to collect the wretched apparel, mattreſſes, coverlets, &c. which are not worth cleanſing, and beſtowing freſh in their ſtead, to deſtroy the ſtuff ſo collected. All this muſt be performed under the inſpection of proper ſuperintendents. It certainly will be better to do that in advance, which may contribute to preſerve the lower claſſes of the inhabitants, and which, in caſe of the infection reaching their houſes, will become at laſt indiſpenſably neceſſary; not to ſay any thing of the heavy expences attending peſt-houſes, &c. which, by theſe early precautions, might perhaps be ſaved.

The views of the police ſhould always be carried forward to the poſſible increaſe of the diſtemper. Each diſtrict, conſiſting of ſeveral pariſhes, according to their ſize or other circumſtances, ſhould provide a ſpot of ground at ſome diſtance from town, together with the materials for erecting temporary infirmaries, and Lazarettos: a burial ground ſhould alſo be included. As the diſtemper uſually paſſes progreſſively from diſtrict to diſtrict, though not regularly, there would be time ſufficient, if well employed, for making the preparatory arrangements now propoſed.

The immediate expence attending them will appear ſmall, when compared with the expected advantages. Each diſtrict ſtanding thus upon its guard, the diſtemper will meet with more difficulties, in making its way from the infected quarter; and if it ſhould happen to elude precautions, a diſcovery will probably be made before it can have ſpread far; the alarm, on its diſcovery, will be leſs than if the diſtrict had been wholly unprepared; and, what is of much more conſequence, the magiſtrate will find himſelf at once in a ſituation to act effectually for the public welfare, without the embarraſſing impediments inſeparable from the want of preconcerted diſpoſition.

[25] Mead, p. 109.

But

But, in order to realiſe the advantages above alluded to, it will be neceſſary to carry the regulations into immediate execution; every day's delay is of fatal conſequence. No complaiſant indulgence to rank, or partiality to connexions; no deluſive hopes of a change for the better; no regard to the diſcordance of medical opinions; nor no apprehenſion of popular clamour, ſhould influence the magiſtrate, in the diſcharge of his duty. Compaſſionately attentive to the unhappy ſufferers, he ſhould exert all his power to alleviate their diſtreſs. But to extend undue indulgence to a few individuals, at the riſk of the community, is to betray a ſacred truſt, and to be wanting in compaſſion to thouſands.

CHAP. III.

Various regulations in the ſecond period of the plague—A public eſtabliſhment propoſed, for lending money upon pledges—Perſons falling ſick in houſes ſhut up—Temporary Lazarettos—Precautions for the preſervation of the acting magiſtrates.

WHEN the precautions taken in the firſt ſtage of the plague, fail of ſucceſs, and the diſtemper is found to have inſinuated itſelf into ſeveral quarters, though all hopes of extinguiſhing it may be at an end, its future progreſs may in ſome degree be reſtrained by a vigorous exertion of the police.

People of rank who are not infected, together with their numerous attendants, ſhould retreat to the country, before matters grow worſe; which will not only be the means of more effectually ſecuring their own ſafety, but will leaſt endanger that of the places to which they retire. In reſpect to themſelves, they may have been very little in the way of infection; but there is

no

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no truſting to the prudence of their domeſtics. Thoſe neceſſarily detained in town, ſhould ſend their families, and ſuperfluous attendants, into the country.

To all other perſons whatever, whoſe circumſtances will admit of removing, and who are not detained by public duty, it ſhould be recommended to leave the town, with all expedition, or to ſend their families into the country. Every day's procraſtination will render their flight leſs ſecure, and more difficult; as it is to be hoped that the country towns, and villages, would have early recourſe to meaſures for their own preſervation: beſides, when flight is too long deferred, there is a riſk of carrying the infection along with them, into the place of refuge.

The wiſdom of the legiſlature muſt determine in regard to the courts of law, which, in former times, have been removed from London. But the old regulations reſpecting public diverſions, and aſſemblies, ſhould undoubtedly be revived; and, conſidering the great increaſe of public entertainments, of late years, their enforcement will be more neceſſary than ever[1].

It may be expedient alſo to ſhut up the churches. This meaſure, which neceſſity enforces at the height of great plagues, if adopted early in the ſeaſon, might prevent the conſequences which have often been obſerved to attend the concourſe at religious aſſemblies, and at proceſſions, in Roman Catholic countries[2]. The clergymen of the ſeveral pariſhes, might be uſefully employed in aſſiſting at the councils of the police; and, in caſe of neceſſity, ſome of the churches might be ſo arranged as to ſerve for the reception of families in quarantine, till more convenient places could be provided. In the Roman Catholic countries, the numerous convents afford commodious houſes for Lazarettos, and are often employed for that purpoſe; the churches

[1] Muratori, p. 41.

[2] Marſeilles and Meſſina.

even,

even, in certain emergencies, have been converted into peſt-houſes[3]. This expedient ought never to be recurred to, except in urgent neceſſity; but objections to it, which have been overruled in countries more ſuperſtitious than England, would, it is to be hoped, be eaſily overcome here.

Places within the town, in large cities, for the reception of the ſuſpected, of the infected, of convaleſcents, and of families obliged to perform quarantine, were recommended as leſs liable to objection, and leſs alarming at the beginning, than the tranſporting ſuch perſons, whilſt yet few in number, to ſome diſtance. But when ſubjects multiply in the increaſe of the plague, it will be adviſable to remove them, as ſpeedily as poſſible, out of town. The reaſon for adviſing the infirmaries to be erected at ſome diſtance, is leſs from an apprehenſion of their communicating the infection to ſurrounding houſes, than with a view of preventing their being overwhelmed in the height of the plague, as at Marſeilles, by crowds wandering from their houſes.

The preventing all avoidable communication, and that early, before the diſtemper has ſpread, is, by the concurrent teſtimony of thoſe who have written from experience, allowed to be a main object claiming the attention of police. In the ſucceſſive attack of pariſhes, it becomes of more and more conſequence, becauſe there can be no longer doubt of the preſence of a peſtilential conſtitution of the air, and no rational hope remains of the contagion declining before the approach of winter.

Perſons who have it not in their power to go into the country, and whoſe houſes are commodiouſly circumſtanced for ſhutting up, after the manner of the Levant[4], ſhould certainly have recourſe to that expedient, before the riſk increaſes of their ſhutting up with the infection, contracted either by themſelves or

[3] Genoa.

[4] Ruſſell's Natural Hiſtory of Aleppo.

their

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their domeſticks[5]. But for the encouragement of this practice, and to render it more generally practicable, it will be neceſſary that the police be particularly careful to eſtabliſh markets in each pariſh, well ſupplied with the neceſſaries of life; and to have a ſufficient number of proveditores for each ſub-diviſion, who ſhould not be at liberty to ſtroll indifferently into all quarters. Theſe proveditores, though unavoidably expoſed by frequenting the ſtreets and markets, ſhould be ſtrictly prohibited from having communication with perſons known to be infected, and ſhould have proper places appointed for their living in ſmall parties together, inſtead of returning at night, perhaps to diſtant ſtreets, to their families. The neglect of precautions of this kind, in reſpect to perſons ſhut up, endangers their being reduced, by the loſs of the proveditores, to the ſad neceſſity of coming abroad to ſeek proviſions for themſelves; which was in ſome meaſure the caſe at Toulon, where the proveditores, not being properly reſtricted, carried the infection into their own families, as well as into diſtricts yet ſound, and almoſt all of them periſhed[6].

Particular care will alſo be requiſite, to prevent thoſe who bring in proviſions from the country, from mingling with the citizens; and to protect the town retailers of proviſions, and neceſſaries, from being crowded; which may be effected by barriers, &c. under the inſpection of pariſh officers. Particular regard ſhould be had to the bakers, as, in moſt plagues, they have been obſerved to ſuffer in a remarkable proportion, and the loſs of them is more generally felt, than that of moſt other tradeſmen. The retail of that article ſhould be diſtributed to many ſhops, diſtinct from the workhouſes of the bakers, in order to prevent concourſe at a few; and theſe ſhops ſhould be guarded with barriers at the public expence.

[5] Muratori, p. 55.

[6] Traité de la Peſte, p. ii. p. 139.

Shops

Shops not vending the neceſſaries of life, had better be ſhut up, by a general recommendation, if not by an expreſs order. Indeed, the want of cuſtomers uſually produces that effect, ſooner or later; at leaſt in reſpect to numbers of thoſe dependent on luxury, or on the ſale of frivolous articles, which are little in requeſt at ſuch times. Many of them might be converted into retail ſhops, for the neceſſary articles of life, as they are occaſionally, at other times, into lottery offices.

Diſtreſs, ariſing from the inevitable ſtagnation of trade, and want of employment, muſt reduce many, above the rank of parochial poor, to the neceſſity of raiſing money for immediate ſubſiſtence, upon pledges. The ſaleſmen, or purchaſers of old clothes, have already been ſuppoſed prohibited from carrying on their trade, agreeably to the uſage of ancient times[7]; but I find no regulations reſpecting pawnbrokers, though their traffic, in the time of a plague, ought on ſeveral accounts to be reſtrained: particularly as it may prove a ſtrong inducement to the pilfering, or ſecreting infected goods, by preſenting ſo eaſy a mode of diſpoſing of them.

In Italy, where they have public eſtabliſhments for lending money on pledges, under the denomination of Monte di Pietà, they lock up all pledges depoſited before the plague in a ſeparate warehouſe, to avoid their being mixed with thoſe newly brought in. Private pawnbrokers are obliged to obſerve the ſame precaution[8]. It appears highly deſerving conſideration, whether, in times of peſtilence, ſomething, in imitation of this, might not be deviſed in every pariſh of London. I ſhall not pretend to enter into the manner of carrying ſuch a plan into execution, but public offices, like the Monte di Pietà, would be more ſecure repoſitories for the property pledged, than houſes of obſcure pawnbrokers; while the goods brought in, if ſuſceptible of infection,

[7] Orders for Health, by the Lord Mayor, 1635. 1665.

[8] Muratori, p. 81.

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might be purified, and kept apart from others. Stolen goods, no doubt, might ſometimes be depoſitated there, but not ſo often as with private dealers, whoſe avarice, excited by the proſpect of great gain, might get the better of the dread of contagion; and in caſe of the houſe being attacked by the diſtemper, the property lodged there, would not only be, in all probability, loſt to the owners, but infectious articles might come to be dangerouſly diſperſed. I ſay nothing of the charity in ſupplying thoſe in want, with a much more adequate advance on their pledges, than is to be expected from private hands.

The retreat of many into the country[9], and the number of families who, remaining in town, would ſhut up in their own houſes[10], would of courſe conſiderably diminiſh the concourſe in the ſtreets, and render it ſafer for thoſe whom duty required to walk about. It would alſo render it eaſier for the magiſtrates to attend the various calls of their arduous office; particularly in regard to the lower claſs of people, among whom the plague is generally found to make terrible havock, and where irregularities have a great ſhare in ſpreading the contagion.

Phyſicians, ſurgeons, apothecaries, nurſes, ſearchers, fumigators, officers of police, and all who have communication with the infected, ſhould be obliged to carry a badge of diſtinction, when they appeared in the ſtreets, and ought not, on any account, to enter any houſe, ſuppoſed clean, their own excepted. The ſound houſes which are ſhut up, ſhould admit no medical perſons, or others from without, except in extreme neceſſity; and in caſe of any one falling ſick of an ordinary diſtemper, wherein medical aſſiſtance cannot be diſpenſed with, the patient ſhould be removed to a ſeparate apartment, and debarred intercourſe with the reſt of the family, till ſuch time as the neceſſity of admiſſion of ſuch medical perſons ceaſes. In moſt chronic ailments, advice may be given without entering the houſe.

[9] Journal of the Plague Year, p. 87.

[10] Ibid p. 241.

If

If in a houſe ſhut up any perſon ſhould be taken ſuddenly ill, he ſhould immediately be ſeparated from the reſt of the family, and it would be better to allot a particular chamber for that purpoſe, under the name of Infirmary. In this ſituation, he might be viſited, not by the common ſearchers, but by others who do not viſit promiſcuouſly in the pariſh, and who, like the medical attendants before alluded to, keep out of the way of infection, as far as is in their power. Medical perſons of this deſcription ſhould be retained in each diſtrict, which would leſſen one ſtrong motive for concealing ſickneſs, in houſes ſhut up, by removing the apprehenſion of the infection being introduced, by the common ſearchers, into places where it was not before: added to which, will be an aſſurance of not being ſeparated from their families, except on very ſtrong preſumptions of expediency.

It has been recommended as an early precaution, in times of peſtilence, for the preſervation of pictures, hangings, or other ſuperfluous furniture, ſuſceptible of infection, and liable to be injured by the ſtronger fumigations employed in the purification of houſes, to remove all ſuch goods into a ſeparate room, which, if the doors were ſealed up, and the keys delivered to the magiſtrate, might be exempted from fumigation afterwards, in caſe of the houſe being infected [11].

In large commercial towns, it may likewiſe be matter of deliberation whether an early embargo ſhould not be laid on trade; and whether it would not be a prudent meaſure for the merchants to ſhut up their warehouſes, depoſiting their keys with a proper magiſtrate. This, in many caſes, would render the purification of merchandiſe, as practiſed with infinite labour at Marſeilles, unneceſſary, and might contribute to a ſpeedier re-eſtabliſhment of commerce; becauſe ſuch merchandiſe, accompanied with authentic certificates, would certainly be leſs liable to ſuſ-

[11] Muratori, p. 81.

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picion than ſuch as had remained in open warehouſes all the time of the ſickneſs, and might therefore be exported with more ſafety.

The tranſporting the ſick from their houſes to the infirmaries, and the ſound part of their families to the Lazarettos, for quarantine; the fumigating, cleanſing, and ſecuring the furniture of the houſes, ſo evacuated; the providing thoſe ſhut up with proper neceſſaries; diſtributing the induſtrious poor into wider habitations, and finding them in employment; the keeping a ſtrict watch over the day labourers, and the tradeſmen, whoſe buſineſs muſt occaſionally call them from home; the enforcing rules for the ſtrict maintenance of good order, and the prevention of thefts and robberies; and laſtly, the exemplary puniſhment of certain crimes, (eſpecially the pilfering or concealing infected goods) in a ſummary manner, to make the more impreſſion, and for which, (if not already in the power of the magiſtrate) the legiſlature ſhould make conditional proviſion; are among the objects to be kept in view, by the police, and are to be obtained by a detail of ordinances adapted to particular ſituations and circumſtances. Of which ordinances, ſpecimens may be collected from thoſe formerly promulgated in England, Italy, and France[12].

The management of the temporary infirmaries for the infected, and the quarantine Lazarettos, which are ſuppoſed to be at ſome diſtance from town, demand likewiſe particular attention, and ſhould be intruſted to perſons of probity and humanity. In Roman Catholic countries, offices of this kind are often committed to eccleſiaſtics; but, in England, the number of that order is too ſmall to be ſo expoſed. The convents, in like manner, furniſh uſeful aſſiſtants, of both ſexes, who devote themſelves to the dangerous ſervice in the infirmaries, and are a check upon the

[12] Orders againſt the infection of the plague, 1603. Certain neceſſary directions, 1636. Orders for health, 1636 and 1665. Muratori. Gaſtaldi.

mer-

mercenary ſervants. Both theſe reſources being wanting in England, other expedients muſt be fallen upon; for a peſt-houſe ill regulated, of all ſcenes of human miſery, preſents the moſt dreadful.

The infirmary intended for thoſe who are in circumſtances to pay their own expences, ſhould be ſeparate from that of the poor, maintained by the public; but both ſhould be as airy and commodious as poſſible. For the reception, in the latter, of ſuch as are confined to bed, ſingle chambers ſhould be allotted; thoſe with ſlighter ſymptoms, able to walk about, may be diſpoſed in larger chambers, or in wards, but not crowded.

The Lazaretto for convaleſcents may be arranged in the manner before deſcribed, that is in wards; but that intended for families in quarantine, which have been removed from infected houſes, muſt be ſo contrived as to afford diſtinct apartments for each family, of the better claſs of people, and airy wards for the poor.

Proviſion for the accommodation of the ſick of the better claſs will be attended with leſs difficulty, becauſe bed-linen, and neceſſary apparel, will be ſupplied from their own houſes; a circumſtance to be attended to at the time of their removal. But the poor will require to be ſupplied with theſe articles, at the public expence; for it will be better to furniſh them with linen belonging to the hoſpitals; and either to preſerve what they bring with them till they recover, or to deſtroy it if not worth preſerving. Their beds, or mattreſſes, ſhould be brought along with them; and if they recover, a freſh bed will be found them when ſent to the convaleſcent Lazaretto. Their own clothes alſo, after being ſmoked and purified, ſhould be returned to them; and, when diſcharged, they ſhould receive a bed, in lieu of that they left behind.

Of

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Of the convaleſcents of higher rank, many will probably leave their linen, &c. behind them, which may be applied to the ſervice of the foul or convaleſcent Lazaretto, after being thoroughly ſmoked and waſhed; but the clothes left in the Lazaretto ſhould on no account whatever be permitted to become the perquiſites of nurſes or ſervants[13].

The procuring perſons properly qualified for the adminiſtration of the infirmaries, and Lazarettos; the providing medical attendants, with other aſſiſtants and inferior ſervants; the ſupplying the various neceſſaries daily required; and ſuch a ſuperintendence of the whole, as may prevent the diſorder and confuſion ſo frequently prevalent in hoſpitals of this kind, is a difficult, but material part of the buſineſs of police, and which, conſtantly increaſing as the diſtemper ſpreads, calls loudly on the opulent citizens, who have retreated from town, for their charitable aſſiſtance.

High wages will be neceſſary, particularly at the beginning, to encourage perſons to undertake the dangerous offices of nurſing the ſick, ſerving in the foul laundry, &c. but afterwards, the recovered poor ſhould be invited to thoſe offices, by an actual temporary proviſion for their families, and a promiſe of future reward.

In theſe hoſpitals, the kitchen and bakehouſe, &c. ſhould be ſeparate from the main building, and the cooks, and others employed there, ſhould have no communication with it except by a barrier, at which they ſhould deliver the victuals, to be taken away by the ſervants within.

[13] It ſeems to have been a great abuſe in ſome of the Lazarettos in Genoa, the dividing the apparel of the deceaſed among the ſervants of the houſe, and the buriers of the dead. Lazaretti di Genoa, p. 124. 481. See before, p. 259.

The apartments for the officers of the houſe, and the medical attendants, ought alſo to be ſeparate from the hoſpital, in order that they may have no more intercourſe with the interior of the houſe, than is abſolutely neceſſary; their preſervation from the diſeaſe, being of material conſequence to the welfare of the whole.

For the ſame reaſon, the acting magiſtrates in each pariſh, ought to be ſtudiouſly careful of their own health. Commodious houſes ſhould be allotted them, where they may live in ſmall companies. No more domeſtics than are indiſpenſably requiſite ſhould be retained, and thoſe ought to be laid under the ſame reſtraint as perſons in houſes ſhut up; proviſions, and every thing elſe from without, ſhould be received with the ſame precautions.

At Toulon, in 1721, the magiſtrates, together with their attendants and domeſtic ſervants, amounting to above fifty ſouls, who dwelt in the town-houſe, all periſhed. The diſtemper was introduced by the laundreſs, and ſpread thus fatally from want of due precaution. "Rien n'y manquoit, parfums, remedes, mais "la ſeparation y'ayant d'abord manqué ils y'ont tous péris[14]." It is certainly very difficult to regulate ſo great a number, living in the ſame houſe, and therefore it is better they ſhould be divided into ſmaller companies. The conſul of Toulon, and another gentleman, who lived in a houſe by themſelves, eſcaped.

The magiſtrates, who in the exerciſe of their office muſt occaſionally go about, ſhould have a guard to attend them, and no perſon whatſoever ſhould be permitted to approach ſo near as to touch them; proper officers ſhould attend alſo to put their orders into inſtant execution. Petitions, reports, and papers of every kind ſhould be received with the ſame precautions as papers at a prattique houſe, that is, they ſhould be firſt dipped in vinegar, and then ſmoked with ſulphur.

[14] Traité de la Peſte, p. ii. p. 137.

The

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The halls in different quarters allotted for the deſpatch of public buſineſs, ſhould be put under the care of prudent houſe-keepers, who ſhould themſelves remain ſhut up, in order that the magiſtrates may be as little expoſed to infection, as the nature of things will admit. For a like reaſon, in caſes where parties in litigation muſt make their appearance, and witneſſes are to be examined, juſtice ſhould be adminiſtered in a church porch, or ſome other ſuch place, and not in the ſtifling air of a common court-houſe.

As the preſervation of the magiſtrates is of eſſential conſequence, ſo proviſion ſhould be made, in caſe of ſickneſs or death, for ſupplying vacancies, either from the magiſtrates of the preceding year, or from others, who, in the mean while, ſhould remain ſhut up in their houſes, or retire to the country, till their ſervice be required. An arrangement of this kind might prevent confuſion.

Theſe are ſome of the moſt material points, reſpecting the police, in the ſecond period of the plague; and where circumſtances have admitted of their being duly attended to, they have been found to contribute greatly to alleviate the public calamity. But in large cities, the magiſtrates muſt expect to meet with obſtacles, and unforeſeen difficulties, which, by the earlieſt precaution, cannot perhaps be obviated, ſo as not to leave room for the exertion of that ſagacious ſelection of means, that promptitude in expedient, that firm adherence to what is calmly judged to be right, and that benevolent public ſpirit, which, in ſuch diſaſtrous times, are required to ſupport their credit, and to ſecure ſucceſs in the adminiſtration of the police.

CHAP. IV.

Regulations in the third period of the plague—Perſons who have ſhut themſelves up in their houſes, ſhould perſiſt courageouſly—Country towns and villages ſhould uſe precautions for their defence—Regulation of inns on the road—Viſitors of infected families, to be ſelected from perſons recovered from the plague—Burial of the dead—Reception of proviſions at the barriers, and diſtribution of them to the interior parts of the town—Magiſtrates, and parochial clergy, ſhould ſhow themſelves occaſionally in the ſtreets.

IN the third period of the plague, the general diſtreſs of the people is ſuppoſed to arrive at its height, and the cares and embarraſſments of the magiſtrate to increaſe in proportion. Sometimes, indeed, the devaſtation overleaps all bounds, anarchy enſues, and, on all hands, ſcenes ſhocking to humanity preſent themſelves. But this ſeldom happens, except where early precautions have been neglected, and it is to be hoped, under Divine Providence, will never happen in Britain.

The regulations, detailed in the preceding chapter, ſhould be continued in this period, till ſuch time as the increaſed number of ſick, renders it impracticable to carry ſome of them longer into execution. Where the plague rages in a moderate degree, this will never be the caſe; but circumſtances may be ſuppoſed, wherein it will be impoſſible to tranſport all the ſick from their houſes, or to find room for their reception in the peſt-houſes out of town. Other meaſures muſt therefore be adopted.

In houſes of the middle, and higher ranks, the ſick might be left in the houſe, with one or two of the family, ſhould they voluntarily offer their attendance. The remaining ſound part of the family, ſhould, if poſſible, be ſpeedily removed, and the evacuated apartments be ſhut up by the magiſtrate. In this con-

 juncture,

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juncture, arrangements may be made in churches, public halls, &c. for the reception of ſuch families as cannot find other places of retreat. Each family, as far as can be, ſhould live ſeparately, and when any one happens to fall ſick, he muſt immediately be removed to a room in his own houſe.

In large houſes, conſiſting of ſeveral floors, the healthy part of the family, may be permitted to remain in that quarter of the houſe, the moſt remote from the chamber of the ſick; and they ſhould conduct themſelves, in all reſpects, in the ſame manner as ſound families regularly ſhut up, admitting no perſons from without, and cutting off all communication with the ſick and their attendants, within doors. The removal of the ſound to another houſe, where it can be done, is however always a preferable expedient. The houſe containing the ſick and the healthy, is to be marked as infected, and acceſs denied to all but thoſe immediately neceſſary about the ſick: the healthy part of the family muſt be ſupplied, in the ſame manner as other families ſhut up. The perſons, thus circumſtanced, by obſerving due precaution, may certainly defend themſelves from the contagion; but the great danger to be apprehended, ariſes from the difficulty of ſtrictly maintaining that precaution, under the ſame roof. I have known many inſtances of large families defending themſelves, by cutting off all communication with the infected chamber. But the eaſtern houſes, by the diſpoſition of their apartments, are better adapted for this than the European.

The number of houſes in this manner converted into infirmaries, will, notwithſtanding the increaſe of the diſtemper, make more room in the peſt-houſes, which may now be allotted to the poor of the lower claſs, whoſe ſick ought as much as poſſible to be removed out of town. But ſhould the number exceed the capacity of the infirmaries, which ought never to be crowded, after tranſporting as many as can be commodiouſly lodged there, the reſt ſhould be removed from the ſmall houſes, to larger ones in their

own quarter; the healthy being all along, as far as it can be done, ſeparated from the ſick. The buſineſs of police, in this reſpect, will be much expedited, by the having attended to the early precautions, formerly recommended, regarding the poor. CHAP. IV.

Perſons regularly ſhut up, inſtead of being diſmayed by the increaſing mortality, and giving way to deſpair, ſhould reſolutely perſevere in the means which have hitherto preſerved them, with an aſſurance, juſtified by repeated experience, that if undue communication be rigidly avoided, they have very little to apprehend [1]. Nor need inſtances of infection, in houſes long ſhut up, raiſe unneceſſary alarm. Such accidents muſt of courſe ſometimes happen; for in a multitude of families ſhut up, all will not be equally careful; and, whatever may be ſaid to the contrary, where the misfortune happens, negligence, or wilful breach of rules, are to be ſuſpected. In houſes that have been only a ſhort while ſhut up, accidents of this kind may reaſonably be expected; for every day's procraſtination, after the diſtemper begins to ſpread, greatly increaſes the chance of ſhutting up with the infection lurking in the family. But on no account ſhould thoſe who have hitherto been preſerved, and are commodiouſly circumſtanced, be impelled by their fears, or allured, from their houſes, to ſeek refuge in the country, or elſewhere; the diſtemper now raging tends faſt to its decline, and they are leſs expoſed to infection in the midſt of the infected city, than they would be in attempting to remove, at a time when every avenue of flight is beſet with danger.

The embarraſſments of the magiſtrate are likely, at this period, to be increaſed, by the loſs of the ſubordinate officers of police, from ſickneſs, death, or flight. Of the proveditores, in the ſervice of houſes ſhut up, many may be ſuppoſed to have periſhed, and muſt be replaced by others; for nothing can more materially promote the ſafety of the citizens, than the preventing thoſe who have been all along ſhut up, or ſuch as have been

[1] Journal of the Plague Year, p. 66.

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removed from infected houſes into quarantine, from being reduced to the neceſſity of coming abroad in queſt of proviſions, at a time when the diſtemper is moſt contagious. The markets, at the ſame time, run the riſk of failing, from the terror and flight of thoſe who uſed to ſupply them; diſorder of various kinds is apt to creep in every where, and the facility of committing crimes, and of avoiding detection, invites to the perpetration of ſome of a nature unheard of at other times.

Beſides theſe embarraſſments, againſt which the legiſlature, and the wiſdom of the magiſtrate ought previouſly to have provided, the rapid increaſe of the mortality will require conſtant recruits of thoſe who remove and bury the dead, numbers of whom may be ſuppoſed to have periſhed. The galley-ſlaves proved a reſource at Marſeilles and Meſſina. At Genoa, perſons were allured by being allowed the ſpoils of the dead. This laſt was an execrable expedient, and in its conſequences was attended, beſides encouraging rapine, with great danger to the community, from the diſperſion of infected ſtuff[2]. In England, for want of ſlaves, convicts might perhaps be induced to undertake the employment, under certain conditions. Some perſons alſo, particularly ſuch as already have had the plague, might be procured by high wages.

Next to the ſecuring proviſions for the living, no duty is more urgent than that of the ſpeedy interment of the dead[3]. In the height of the plague, every hour's delay multiplies the evil; and of the numerous train of calamities at Marſeilles, Meſſina, and other places, the accumulation of dead bodies in the ſtreets, and in the houſes, occaſioned the moſt dreadful embarraſſment to the police[4]. The time required to tranſport bodies to diſtant burying grounds, may render it neceſſary to open trenches nearer the town, than at firſt, but burying within the town ſhould all along be avoided, as much as poſſible. Whether quick lime

[2] Lazaretti de Genoa, p. 124.

[3] Journal of the Plague Year, p. 206. 214.

[4] Relation Hiſtorique, p. 161.

ſhould

ſhould be employed, is a ſubject upon which opinions differ, and which I ſhall not pretend to decide. Doctor Mead recommends burying deep in the earth, and covering with the exacteſt care, but ſays nothing of lime; the Italians and the French uſe lime, and the practice ſeems to be approved of in the advice of the College, in 1665, for the firſt time, there being no mention of it in their directions of earlier date. In the manner lime is often applied, it cannot be of much utility, a great part being loſt, or unequally diſtributed, in throwing it into the trench[5]; and unleſs there be little or no doubt of the advantages propoſed by it, the labour and expence had better be ſaved, at a time when both can be applied to better purpoſes, particularly in white-waſhing the habitations of the poor.

Connected with the clearing the town of the dead bodies, is the keeping the ſtreets in all other reſpects ſweet. Directions on this head are found in the old orders for health by the Lord Mayor; but the firſt article, obliging houſeholders to pare the ſtreets, before their own doors, though proper at the beginning, cannot be obeyed at the height of the plague, becauſe many houſes and ſhops are then ſhut up, or uninhabited: the office muſt therefore devolve on the magiſtrate.

It may naturally be expected, at this period, that numbers who have hitherto remained in town, may be tempted, at all events, to fly from ſuch ſcenes of deſolation and horror; nor will it be in the power of the magiſtrates to attend ſo ſtrictly as at the beginning, to the applications for paſſes. The adjacent villages and county towns ſhould therefore be more ſtrictly on their guard, (having before made preparation) and ſhould oblige all tra-

[5] On the ſubject of lime, ſee Le Lazaretti de Genoa, lib. ii. p. 291, where it is obſerved, that a trench, containing a hundred bodies, will be ſufficiently covered with fifty baſkets of lime, whereas the ſame number of bodies buried in ſeparate graves, would require two hundred baſkets. Five ſpans of earth are conſidered to be ſufficient for covering the body.

vellers,

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vellers, especially those who have no passports, to perform a certain quarantine, previously to their admission.

Particular attention will be required to inns upon the high road, which, by the promiscuous reception of travellers, must necessarily be much exposed to danger, and a dread of losing their custom will be a temptation to conceal the distemper, should it find its way into them. In the orders by the King, published in 1603[6], the signs of infected inns were commanded to be taken down, which seems to be a very proper precaution; but, since that time, inns have been so greatly multiplied, that it might conduce to the public safety, to appoint particular inns solely for the reception of persons coming from suspected places, after their passes had been examined by the civil magistrate; those coming from places actually infected, should be obliged to perform a quarantine, previously to their admission at any inn. All other inns should give a daily report, to the magistrate of the place, of the guests they receive; and travelling in the night-time should be strictly prohibited, in the vicinity of infected, or suspected places.

It were well also, if the country towns, through which the public roads pass, were provided with proper places, at a distance from other houses, whither persons taken ill at the inns might immediately be removed, and properly attended; for, at such times, every sudden illness is to be suspected, and it would be some inducement for travellers not to conceal their indisposition, if they knew they were not to be abandoned upon the discovery of it, but treated with equal tenderness as at the inn itself.

Towns more immediately connected with an infected place, should very early take alarm, and by precautions, similar to what have before been recommended to the several parishes in the

[6] Article v.

capital,

capital, provide for their internal ſecurity, leaſt their barriers and Lazaretto, to which they ought at firſt to have had recourſe, ſhould fail in their defence [7].

Theſe precautions to prevent the ſpreading of the infection in the country, may much more eaſily be carried into execution in villages and ſmall towns, than in extenſive and populous cities; and it may be remarked, that by the ancient orders of 1603, againſt the infection of the plague, the juſtices in the ſeveral counties, being inveſted with full power for carrying regulations into execution, were commanded to make a report of their proceedings, once every three weeks, to the Lords of the Privy Council. Care alſo was taken to make due proviſion for the maintenance of the infected poor, and to prevent general communication with the ſick. A principal defect was the not more perfectly ſeparating the healthy part of the family, from the diſeaſed.

But at this diſaſtrous period, the city magiſtrates, leaving to the council of health, the care of giving directions to the country diſtricts, will find ſufficient employment in carrying their own regulations into execution, as exactly as circumſtances will permit; and more eſpecially in averting from their half-deſolated town, dearth, popular tumult, profligacy, and the extreme of human calamities, in ſuch times, the coacervation of putrifying corſes in the houſes, and in the ſtreets.

For the prevention of abſolute dearth, precautions ſhould have been taken long before the diſtemper arrives at ſuch a height; but, beſides theſe, the interpoſition of the council of health, with thoſe places from whence proviſions are derived, will be conſtantly required, to procure daily ſupplies, in order to prevent prices being enhanced, and the public granaries, or magazines, from being too haſtily exhauſted.

[7] Journal of the Plague Year, p. 229.

The

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The perſons who bring proviſions from the country, ſhould be prohibited from having too near an intercourſe with the citizens, which to themſelves might prove fatal, beſides conveying the infection to places yet free. For this reaſon the buſineſs might be tranſacted at certain barriers, without admitting the country people into the interior of the town[8]. Perſons from ſuch country towns as are not yet infected, ſhould be appointed to ſuperintend, whoſe intereſt it would be to ſee the regulations, intended to prevent the malady from ſpreading, duly enforced.

The tranſporting proviſions from the barriers to the markets in the interior parts of the town; the ſeeing a fair partition made to the ſhops; the diſtribution of neceſſaries to the poor, to the ſound families ſhut up, and to thoſe in quarantine, &c. will require many overſeers ſubordinate to the magiſtrate. Theſe ſhould be perſons, in whoſe honeſty ſome degree of confidence can be placed; and as, in the diſcharge of their duty, they muſt themſelves be expoſed to conſiderable danger, ſuch perſons, where vacancies are to be filled up, ſhould be ſought for, among the induſtrious order of inhabitants lately recovered, many of whom may, by proper encouragement, be induced to undertake an eſſential ſervice, attended with much leſs riſk to them than to others.

Some matrons alſo of the ſame claſs, and in the ſame circumſtances, inveſted with authority to ſuperintend the nurſes, &c. might be employed to viſit occaſionally in the infected houſes, at different hours from the medical aſſiſtants. If a viſitation of this kind be found requiſite in regular hoſpitals, it muſt be much more ſo in the numerous private houſes, now converted into hoſpitals, where wretched families, deprived, by death or ſickneſs, of their natural protectors, are expoſed to a variety of evils, which might probably be obviated, or alleviated by ſuch an interpoſition. It would, moreover, be ſome check on the menial ſervants who attend the ſick, and contribute ſomewhat to the

[8] Journal of the Plague Year, p. 94.

pre-

prevention of crimes, and diſorders in the interior of families, which, but for the facility of eſcaping detection, would more ſeldom be thought of, or committed. CHAP. IV.

I have, before, had occaſion to mention the reſources of the Italian ſtates, in the various religious orders of both ſexes, who are often employed in the offices we are now talking of. Some of whom devote themſelves voluntarily to the moſt dangerous ſervices; and all are encouraged, upon ſpiritual grounds, to exert themſelves in charitable acts of aſſiſtance to the afflicted, in times wherein they are ſo much wanted [9]. Such as determine to expoſe themſelves, deliver in their names to their reſpective ſuperiors, by which means it is known where application may be made, when occaſion requires [10].

In Proteſtant countries, the ſubjects are few from whom ſervices of this kind are particularly to be expected; the motives for thus devoting themſelves are leſs powerful, and other inducements, than abſolutions and indulgencies, will be required to induce many to riſk their own lives in the ſervice of others. The clergy, however, with little danger to themſelves, may, in thoſe times, be actively and uſefully employed. The exerciſe of many dangerous functions about the ſick, deemed eſſential by the Roman Catholics, are not required of them. Divine ſervice in the churches, and even the celebration of funeral rites, are ſuppoſed to have been ſuſpended; the adminiſtration of baptiſm, in caſes of neceſſity, may be transferred to ſurgeons and midwives, who might officiate, without expoſing themſelves more than in the ordinary courſe of their buſineſs: nevertheleſs, other offices remain for the clergy. They may, by ſeaſonable advice, aſſiſt the pious in their devotions; they may exhort the people to be patiently reſigned under the reſtraints neceſſarily impoſed

[9] Particular indulgencies are granted, by the Pope, to perſons of all denominations, who ſhall voluntarily aſſiſt in the ſervice of the infected. Muratori, lib. iii. c. i.

[10] Ibid. lib. iii. c. i. c. vi. p. 296.

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by the magiſtrate; and above all, they may excite them to the tender offices of humanity, and chriſtian charity. But as example, at all times, has more influence on the populace than precept, it will be incumbent on eccleſiaſtics of every denomination to remain in their ſtations, and, by taking ſuch a ſhare in the public labour as the magiſtrate ſhall appoint, encourage their fellow citizens to ſtand firm to their allotted poſts; truſting, after taking every human precaution, but flight, to the protection of Divine Providence [11].

At this melancholy period, when the diſtemper almoſt reaches its height, and when deſpondence prevails univerſally, it becomes more than ever neceſſary, that the principal magiſtrates, and the clergy, with the badges of their office, ſhould ſhow themſelves occaſionally in the ſeveral diſtricts. This might be done on horſeback, or by having the way cleared, without much danger, and their appearance would revive the expiring courage of the citizens [12]. At the ſame time, ſome conſolation may be derived from the proſpect of approaching winter, which will infallibly produce a rapid change in the courſe of the diſtemper.

CHAP. V.

Regulations in the fourth period, or decline, of the plague—Infected poor ſhould be removed from their houſes—Account ſhould be taken of infected houſes, preparatory to their expurgation—The poor, in the temporary Lazarettos, ſhould remain—Purification of merchandiſe in warehouſes—Meaſures for the reſtoration of commerce with other ſtates—Termination of ſundry plagues, at London—The real ſtate of the diſtemper ought not to be concealed, &c.

TOWARDS the end of September, but ſtill more ſenſibly in the ſecond week of October, the plague, at London, has

[11] Journal of the Plague Year, p. 33.
[12] Ibid. p. 211, 213.

uſually

uſually been obſerved to decline; and its decreaſe, in November, has been always rapid. This is the ordinary tenour of its courſe, from which it rarely deviates more than a few days; and, though a fluctuation in the number of funerals is ſometimes remarked in September, the diſtemper always arrives at its height in that month, decreaſing as conſtantly in the ſubſequent months, with increaſed rapidity, in proportion as the winter advances[z].

The diſtemper becoming leſs contagious, and the diminution of the weekly funerals, indicate a material alteration in the ſtate of the air; and could it be known with certainty, that the peſtilential conſtitution would terminate in the winter, the future cares of the council of health would be greatly leſſened. It has been already ſhown that, notwithſtanding the quantity of infected ſtuff accumulated at the end of a plague, in towns where purification of houſes and furniture is very little practiſed, few or no conſequences are obſerved in the following year, unleſs the ſame conſtitution of the air which concurred before, ſhould again concur, to the propagation of infection.

But as it cannot, by any human means, be foreſeen whether the peſtilential conſtitution of the air will end completely in the winter, or revive with the return of ſummer, it behoves the police to take precautions againſt the worſt that can happen; and to endeavour, by proper reſtraints, to prevent a raſh concourſe, and communication of the populace, which, in the ſequel, might become dreadfully fatal. Such precaution becomes the more neceſſary, as the people upon a manifeſt meliority in the publick health, are prone to hurry from one extreme to the other, to conſider all further reſtraint as ſuperfluous, and to ruſh as precipitately into danger, as they before fled from it.

[z] See before, book iii. p. 270.

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Thoſe who have retreated into the country, or who have remained ſhut up in their houſes in town, ſhould be adviſed to have patience for a little while longer. A week, or ten days, makes a material difference in the riſk of expoſing themſelves, and their domeſtics, in the ſtreets; and the thinner the town remains, the more the magiſtrate will be at liberty to purſue meaſures for rendering an unreſerved intercourſe ſoon ſafe to all.

Thoſe who remain in quarantine, in houſes which have been infected, ſhould be adviſed not to relax in their precautions, before the chambers of the ſick have been duly purified. If there happen to be convaleſcents in the ſame houſe, it may be left optional, whether the ſound, in quarantine, will remove to a clean houſe, to finiſh their quarantine; or whether the convaleſcents will remove to a place deſtined for their reception. But as ſoon as returning quiet will admit of better regulations, a ſeparation ſhould be made, and both ſhould not, on any pretence, be permitted to dwell in the ſame houſe.

Where there are no convaleſcents in the houſe, or after their removal, the apartments of thoſe lately ſick ſhould be purified with all expedition; and till ſuch time as that be accompliſhed, the ſound in quarantine ſhould not be admitted to prattique.

The law, and the orders relating to convaleſcents walking the ſtreets, ſhould be enforced. By convaleſcents are here meant thoſe not twenty days recovered, or thoſe with ſores not yet healed.

In reſpect to thoſe, at this time, taken ſick, they ought to be ſpeedily removed, and the apartment immediately ſmoked, and locked up by the magiſtrate. The reſt of the family, in large houſes, if they cannot conveniently retire elſewhere, may be permitted to perform their quarantine at home.

From

From the houſes of the lower claſs, the ſick, the convaleſcents, and the ſound, ought invariably, where it can be done, to be removed to the reſpective hoſpitals out of town. This, from the decreaſe of the ſickneſs, will become more and more practicable every day. But till that can effectually be done, the infected ſtreets inhabited by the poor ſhould be inveſted, ſo as to prevent dangerous intercourſe by their wandering about; and in the mean time, till there be room in the hoſpitals, they ſhould continue to be ſupplied with proviſions in their own houſes, at the public expence.

All regulations relative to keeping the ſtreets ſweet, &c. which, during the late confuſion, may poſſibly have in ſome meaſure been neglected, ſhould again be revived; and the dead ſhould ſtill be buried out of town, or in the wide church-yards only.

Proper officers ſhould now be employed in taking a particular account, of the families voluntarily ſhut up in their houſes; of thoſe remaining in quarantine; of empty houſes not yet purified; and of houſes actually or lately infected. The ſtate of the ſeveral diſtricts being thus procured, it will be time to ſet about the purification of ſuch houſes as require it. As to the houſes which have been all along ſhut up, and wherein no accidents have happened, it will be unneceſſary to oblige them to undergo that ceremony: or ſhould they themſelves chuſe it, the materials may be delivered to them to fumigate themſelves, without admitting the common ſmokers. It will be adviſable for them to remain at home, till the general fumigation in the diſtrict be nearly finiſhed[2].

The purification of infected houſes ſhould be performed under the inſpection of confidential officers, who ſhould take care to ſee it effectually done, and, at the ſame time, prevent embezzlement

[2] Traité de la Peſte, p. ii. p. 160. 208.

For an Account of the Method of Purification of Houſes, &c. employed after the laſt Plague of Meſſina, ſee La Memoria Iſtorica du Orazio Turriano, p. 143.

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of the goods expoſed in the chambers. This will be more eſpecially neceſſary in houſes where none of the family are left; but where it happens that ſome of them are in quarantine in the houſe, or elſewhere, one or more may be permitted to take care of the effects, when trunks, preſſes, &c. are opened. Stuff of a ſuſpicious kind, which may require more complete purgation than mere ſmoking, or perhaps to be deſtroyed, ſhould be put up in bales, with tickets indicating whoſe property it is, and tranſported, in guarded carts, to ſome ſecure repoſitory, where it may remain till future leiſure.

Store rooms, where ſuperfluous furniture was lodged at the beginning, if the doors were ſealed up, and the keys lodged with the magiſtrate, may be exempted from fumigation, even although perſons ſhould have afterwards died in the houſe; but the reſt of the chambers, and other looſe furniture, ſhould be treated as uſual.

The number of houſes to be purified being aſcertained, it will be eaſy to make a rough eſtimate of the time required for doing it; and, for the ſake of expedition, they ſhould be taken without diſtinction, in the order they preſent; ſome regard, however, ſhould be had to ſuch infected houſes, the ſound inhabitants of which had removed, and only wait for permiſſion to return home, their quarantine having expired. A regular diſpoſition, made previouſly, will greatly facilitate this operation, and if ſeveral pariſhes unite together in the ſame plan, as they happen to border on each other, it would contribute to deſpatch.

The next object will be the admiſſion to prattique of thoſe who have completed their quarantine, whether in their own houſes, or in other places: all of whom, together with their beds, apparel, &c. ſhould be fumigated. If a pariſh regiſter of the time of their entrance into quarantine has been neglected, ſome care will be required in making enquiry.

What

CHAP. V.

What has been ſaid, of the purification of houſes, refers chiefly to thoſe of better rank; and as the uſual courſe of the plague is from one diſtrict to another, declining in this, while it increaſes in that, ſeveral pariſhes, at this period, will ſoon be in a condition to ſpare workmen to aſſiſt in others later infected.

But what greatly concerns the general welfare, is the purification of the dwellings of the lower, but induſtrious claſſes of inhabitants, many of whom, from long want of employment, and other cauſes, muſt be reduced to a deplorable ſtate of indigence. The rendering their houſes ſafe and comfortable will contribute to the future ſecurity of the public health, and, at the ſame time, is a charity greatly conducive to the advantage of human ſociety. Many of thoſe who are in the convaleſcent Lazaretto, will ſoon be in a condition to return to their families, and the ſooner they can with ſafety be reſtored to them, the better for the public.

The reſt of the poor, eſpecially ſuch as are commonly maintained by the pariſh, and with which the Lazarettos may be ſuppoſed to ſwarm, ſhould, if means can be deviſed, be kept entirely out of town, till the return of the warm ſeaſon removes all apprehenſion reſpecting the enſuing year. They perhaps might be lodged in barracks, or otherwiſe, in a way fully as comfortable as in their wretched dwellings in town, and, in caſe of a return of the plague, their being already in the country would ſave the police an infinite deal of trouble afterwards, as well as greatly facilitate attempts to extinguiſh the diſtemper, at its reſuſcitation in particular pariſhes. At any rate, it would be ſome check on the progreſs of contagion, the propagation of which is known to be much promoted by the intercourſe of the lower claſs of the poor.

If the above meaſures for the purification of dwelling houſes have been aſſiduouſly carried into execution in November, a

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freer communication may ſafely take place in the following month. Unneceſſary concourſe, and aſſemblies, ſhould ſtill, however, be diſcouraged; and even the churches ſhould remain ſhut, till the peſtilential burials be reduced very low: their total ceſſation is, perhaps, not yet to be expected. Such of the churches as from neceſſity may have been employed as temporary receptacles for perſons removed from infected houſes, ſhould be carefully cleanſed and ſmoked; and, it may be adviſable, that all the churches indiſcriminately ſhould be well aired by fires.

In regard to the purification of merchandiſe in warehouſes, in the manner practiſed at Marſeilles, I conceive it to be impracticable in ſuch a city as London, and if an early embargo has been laid on trade, numbers of warehouſes muſt have remained ſhut up all the time of the ſickneſs, which would render it unneceſſary in reſpect to them. Goods of a more ſuſpicious kind, which have not been thus ſhut up, might be ſent to the Lazaretto to be aired, or perhaps be fumigated in the warehouſe. Some precaution of this nature will be prudent, in relation to the neighbouring ſtates, which may more readily be induced to renew their intercourſe and commerce.

It may be objected here, that ſuch multiplied precautions and reſtraints, beſides the expence, labour, and endleſs inconveniencies, reſulting to the whole body of the people, and to every kind of buſineſs, appear to be unneceſſary or ſuperfluous; becauſe the winter's cold will of itſelf put a ſtop to the diſtemper. And moreover, that it will be impoſſible to carry purification, ſuppoſing its efficacy admitted, to ſuch a degree of perfection, but that a quantity of infected ſtuff muſt unavoidably remain ſufficient to revive the diſeaſe, ſhould the conſtitution of the enſuing year prove favourable to its ſpreading. In anſwer to this, I ſhall refer to what has been already ſaid in another place[3], re-

[3] See before, book iii. chap. v. 264. 280.

peating

peating only, what I have before ventured to offer as an opinion, that if the peſtilential conſtitution of the air were to terminate completely at the latter end of the year, the precautions above recommended would, in a great meaſure, be locally ſuperfluous; the plague would ceaſe independently of them. But if that conſtitution lingers in any degree, the propoſed purification, though imperfect or defective, may conduce, at leaſt, to moderate the progreſs of the diſtemper, the return of which it had failed in wholly preventing; it may ſave many though not all[4].

I have ſaid locally ſuperfluous, becauſe though it may happen, on one ſuppoſition, to be of little ſervice to the town itſelf, it may prove of material conſequence to other places not hitherto viſited; for there is no doubt, that infectious goods which, in a town juſt recovering from the plague ſeem to produce little or no effect on thoſe who handle them, are capable, if tranſported to other places yet ſound, of there communicating the infection. It is equally certain, that the ſtate of the air, as it reſpects contagion, may in two places not far diſtant differ ſo eſſentially, that while the diſtemper is rapidly decreaſing in the one, it may be increaſing in the other; of which the territory of Marſeilles, as well as ſeveral towns of Provence, in 1720, afford inſtances[5].

The purification of dwelling-houſes, furniture, &c. and of ſuch ſuſpected articles of merchandiſe as are to be retailed, and conſumed in the place recovering, is a prudential meaſure always to be adopted, as far as circumſtances will permit, and falls directly under the department of the local police. But the council of health, extending its care, on a wider ſcale, over the whole kingdom, and comprehending merchandiſe intended for other countries, as well as that for home conſumption, will no doubt think proper to lay the capital, or manufacturing towns, under

[4] See book iii. chap. vi.

[5] Traité de la Peſte, p. i. p. 464. Relat. Hiſt. p. 361. See alſo before, book iv. chap. v. p. 263.

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ſuch temporary reſtraints, as, in co-operation with the regulations of other towns or diſtricts, for the reception of ſuch merchandiſe may more effectually prevent the contagion from ſpreading in the country. In regard to foreign commerce, the council will alſo ſo regulate exportation, that other nations may the ſooner be induced to reſume their trade with Britain, which moſt probably muſt have been interdicted[6].

When the communication begins to be more free, in the month of December, it will be time for thoſe of every denomination who have been employed in attendance on the infected, and can now be ſpared from the ſervice, to retire into quarantine; for which it would ſeem incumbent on the liberality of the public, to provide the accommodations. The magiſtrates, and others who have hitherto expoſed themſelves, ſhould likewiſe perform a ſhort quarantine.

Thoſe who ſtill have intercourſe with the ſick, ſhould be debarred promiſcuous communication, and be obliged to carry the uſual badge of diſtinction. Convaleſcents of whatever rank ſhould ſequeſter themſelves till ſuch time as their ulcers are healed; and after their quarantine, they ſhould be waſhed and fumigated.

While the city indulges the pleaſing proſpect of returning calm and proſperity, frequent alarms are to be expected; for the diſtemper does not ceaſe at once, and common report often exaggerates.[7] The continuance of the plague, in a ſlight degree, is no more than what happens in the ordinary courſe of things,

[6] In 1665, whilſt the plague raged at London, neither France, Spain, Naples, Portugal, Holland, or Italy, would admit our manufactures or ſhips into their ports, though the ſhips in the river remained free till Auguſt. The prohibition was continued for many months after the diſeaſe declined. The Dutch and Flemings are ſaid to have made a conſiderable advantage of the times, by purchaſing our manufactures from towns not infected, and tranſporting them to Spain and Italy; for the export trade of the out ports ſubſiſted ſome time after that of London had been prohibited.

[7] Journal of the Plague Year, p. 278.

and

and by no means implies, that the enſuing year will infallibly prove highly peſtilential. CHAP. VI.

In the year 1603, there died of the plague, at London, above thirty thouſand, according to the bills of mortality; in the year following, under nine hundred. In 1625, there died above thirty-five thouſand; and, next year, only one hundred and thirty-four. In 1636, there died above ten thouſand; next year, three thouſand; and in 1638, under four hundred[8]. In 1665, there died, according to ſome, ſeventy thouſand; according to others, ninety-thouſand; next year, about one thouſand eight hundred; and in 1667, no more than thirty-five. Of all thoſe years, the plague of 1625 terminated the moſt rapidly. Some of the others continued ſeveral years ſucceſſively, with little or no interruption; but in none of them, except in 1637, did the mortality of the ſecond year bear any proportion to that of the firſt. There is, however, an exception to this general remark, in the century immediately preceding; for in 1592, eleven thouſand are ſaid to have died of the plague; and in 1593, ten thouſand[9].

The real ſtate of the plague, in this as well as in the firſt ſtage, if due pains are beſtowed in procuring intelligence, will be in the poſſeſſion of the council of health; and an authentic account ſhould be publiſhed weekly. The policy, in ſome countries, of deceiving the people, with a view of preventing alarm; and of ſending abroad falſe accounts, in order to prevent the interruption of commerce with other ſtates, ſhould never be imitated. It is a wretched expedient, which betrays the people into a perfidious ſecurity, and throws them off their guard; and if ſo much be aſcribed to the effects of fear and alarm in prediſpoſing perſons to infection, ſurely leſs is to be apprehended when they are gradually prepared, from the beginning, than when the calamity

[8] Graunt thinks it probable, that about one-fourth more died of the plague than are returned for ſuch. Nat. & Polit. Obſ. 2d edit. 1662.

[9] Ibid. p. 31

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falls upon them unexpectedly at once, at a time too when the plague has become more contagious. In regard to other ſtates, without effectually impoſing on them, it deſtroys public confidence, and renders them juſtly ſuſpicious of all future favourable accounts, though, in reality, they may happen to be true. The interruption of commerce, inſtead of being removed, is protracted; and the moſt ſolemn declarations of the magiſtrate come to be received with diſtruſt. The people are undoubtedly entitled to authentic information. If matters carry a favourable appearance, there can be no reaſon for miſrepreſentation; if otherwiſe, it is fit they ſhould know the undiſguiſed truth. The provident will make their arrangements in time, and the majority of the inhabitants, by a compliance with neceſſary regulations, will more cordially co-operate with the magiſtrate, who they truſt does not deceive them, and who they are perſuaded will not wantonly impoſe any ſuperfluous reſtraints, for averting the impending evil.

But however much the plague may be reduced at the period we are now treating of, and however inconſiderable may be the mortality, the police ſhould ſteadily perſevere in the uſual precautions of immediately ſeparating the ſick from the ſound, and of purifying the infected houſes; the inconvenience will be felt by a few individuals, the advantages, in caſe of the diſtemper's increaſe, will be reaped by multitudes.

Should it be aſked, whether, on the ſuppoſition of the apprehended calamity being actually impendent, the precautions ſo confidently propoſed, can rationally be expected to avert it? It may be anſwered, that the experience of Marſeilles, and other places, affords good reaſon for thinking they may, if not completely, at leaſt in a conſiderable degree [10].

How far the continuance of the plague at London, eight years at one time, and twelve at another, may be aſcribed to the neglect

[10] See book iii. chap. v.

of

of ſimilar precautions, has been fully conſidered in another place[11]. Dr. Mead believed, that the old cuſtom of ſhutting up the diſeaſed and the healthy together, contributed very much to the long continuance of the plague, every time it was at London, and that it had as ill effects in other countries[12]. But I am inclined to doubt this; for though that cuſtom, on many accounts ſo juſtly condemned, might increaſe the mortality, while practiſed, it does not appear to have ever prevailed in the decline of the plague; and conſequently the continuance from one year to another, now alluded to, cannot be imputed to that cauſe. Neither does it appear, when the practice was diſcontinued, as in 1636, and 1625, that the plague declined ſooner than at other times: on the contrary, the plague of 1636 is ſaid to have continued twelve years[13].

The advantages expected from the exact purification of houſes, and other precautions, proceed on a ſuppoſition that ſtrict care be taken, at the ſame time, to prevent the reception of freſh infection from other places; without which, the beſt meaſures to deſtroy what already lurks in fomites within the town, muſt fail in their purpoſe.

At Marſeilles, in 1722, the return of the plague was imputed to contagion imported from Avignon[14]; and perhaps the long continuance of it formerly at London, might in ſome inſtances be owing to infection recently imported from foreign parts[15]. But however that may be, it is obvious that a place where the plague has raged, and is now declined, ſhould be on its guard, in reſpect to other places where it is beginning, or raging; and more eſpecially if in the vicinity of the place, or on the ſame iſland.

[11] See book iii. chap. vi. p. 287.
[12] Mead, p. 93.
[13] See before, p. 274.
[14] Traité de la Peſte, p. ii. p. 235. See alſo before, book iii. p. 284.
[15] See before, book iii. p. 287.

The

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The recovering city ſhould therefore prohibit intercourſe with ſuſpected places, and receive nothing from them without the precautions already deſcribed; it ſhould exerciſe the ſame circumſpection with regard to them, that they did, or ought to have done, in their intercourſe with it under ſimilar circumſtances.

If matters go on favourably through the winter, and no remarkable increaſe of freſh accidents be obſerved in the months of April and May, there will be ground to hope the beſt; but no certain judgment can be formed earlier than June, before which time, it would appear, from the bills of mortality, that the plague at London, ſeldom made conſiderable progreſs. In the bills now before me, I find no peſtilential funerals in the months of January and February; and in 1636, and 1665, none till April. In May, the increaſe of the burials became more ſenſible, and ſtill more ſo in June.

Should no conſiderable increaſe of freſh accidents be remarked in June, the plague will, in all probability, either ceaſe ſoon, or linger in a ſlight degree till the winter, purſuing its uſual courſe, as to increaſe and decline, through the ſubſequent months. This event will ſhow the ſtate of the air to be ſlightly diſpoſed to favour contagion; but if no accidents, or very few are obſerved in June, there will be reaſon to conclude that the peſtilential conſtitution of the air is completely changed.

In the firſt caſe, the number of ſick being inconſiderable, it will be attended with little inconvenience or difficulty to continue the former regulations, reſpecting infected families, and they ought indeed to be ſtrongly enforced, in order to exterminate the lingering infection; for although the ſtate of the air, at that time, may be but ſlightly diſpoſed to favour contagion, it may poſſibly become more ſo in the enſuing year, as happened at Aleppo, in 1761 and 1762, and proper precautions,

if

if at the ſame time care be taken in regard to intercourſe with other infected places, may probably ſave the city from a more formidable viſitation, even on the ſuppoſition of a change favourable to contagion taking place in the air. After the great mortality in London, in 1603, when above thirty thouſand are ſaid to have died, the burials, in the year following, were reduced to nine hundred; and, in 1605, to four hundred and forty: but they increaſed conſiderably in the three ſubſequent years; and, in 1609, amounted to four thouſand two hundred. In 1636, ten thouſand and four hundred died; next year, three thouſand and eighty-three; and, in the two ſucceeding years, the burials were reduced to leſs than four hundred annually; but after this they again increaſed, and, in 1647, roſe to three thouſand ſix hundred. The long continuance of the plague, in ſome of theſe inſtances, might perhaps, in ſome meaſure be owing to neglect on the part of the police, and to the raſh intercourſe of the people, when they had got rid of their former apprehenſions[16].

In the ſecond caſe, that is when no accidents, or very few are obſerved in the months of June or July, the attention of the police ſhould be chiefly directed to the prevention of intercourſe, or commerce, with other infected places; eſpecially if the plague continues in the iſland, or happens to rage in any of the neighbouring ſtates, on the Continent.

The political regulations treated of in this and the three chapters immediately preceding, have been chiefly collected from writers who produce experience in ſupport of the precepts they recommend. A few alterations, which have been occaſionally introduced, were ſuggeſted by an attentive compariſon of thoſe ſeveral authorities, and by circumſtances in the general courſe of the plague, which I have had occaſion to obſerve myſelf, and which made an impreſſion upon me at the time. I am fully ſenſible, however, that the meaſures I have ſelected will admit of

[16] See before, book iii. chap. v. and vi. and Journal of the Plague Year, p. 264.

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improvement, and of being new modelled, by perſons more converſant with the general adminiſtration of police, and conſequently better qualified for adapting and applying it to particular circumſtances and ſituations than I pretend to be. The ſpirit of them, I conceive to be founded on ſound authority; the detail will, I doubt, be found in many points defective, in others liable to objection: but they may be variouſly corrected and modified, and the ſpirit of them ſtill preſerved.

CHAP. VI.

Medical preſervative regulations againſt the plague—Mode of fumigation deſcribed—Materials employed for that purpoſe—Experience in favour of the practice, but its effects perhaps exaggerated—Kindling fires in the ſtreets, and firing of cannon, appear to be of no ſervice—An error reſpecting the practice of the Arabians—External and internal preſervatives—The Preſcriptions of the College require reformation—Extemporaneous preſcriptions ſhould be ſimple, and of eaſy preparation—Iſſues, and tobacco, as preſervatives—Precautions for ſuch as approach the ſick, &c.

FREQUENT mention having been made, in the preceding chapters, of the practice of fumigation, for purifying infected houſes, and goods, I ſhall here give a deſcription, from Muratori, of the manner of performing that operation in Italy; and ſubjoin a liſt of ſome of the principal ingredients uſually employed[r].

[r] Lib. i. c. ix. p. 74. This author has alſo in his ſecond book, made many large collections, from various writers, on the ſubject of the preſent chapter.

Letters relating to the Plague, by Theophilus Lobb, M. D. London, 1745, may alſo be conſulted.

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The infected apparel, linen, ſheets, coverlets, &c. are to be ſpread out upon lines, ſtretched acroſs the chamber, the ſeams, of ſuch articles as require it, being unript. The doors, windows, and chimneys are then to be ſhut up, ſo as to prevent the ſmoke from making its eſcape too ſoon. When this is done, four or five pounds of dry hay are placed at bottom, and upon that are ſtrewed four handfuls of the ingredients in powder, which being covered with a little more hay, the whole is ſprinkled with vinegar, in order that the materials may not be conſumed too faſt. The fire is applied in ſeveral places at the bottom, the hay being raiſed and ſupported by a poker; and after the whole is well kindled, the perſon employed, immediately retiring, takes care to ſhut the door. The houſe, or chamber, remain cloſe ſhut up three days; after which the houſe and goods are carefully aired.

The combuſtible materials, I ſuppoſe, are laid upon a braſier, which may anſwer very well in Italy, where the floors are generally brick or plaſter; but for boarded floors, the fire muſt be guarded by a better apparatus, to prevent accidents.

The method of ſmoking ſhips, deſcribed by Dr. Lind, ſeems preferable to this. After carefully ſtopping up all the openings and crevices, a number of iron pots, properly ſecured, are placed in the hold, &c. Each of theſe contain a layer of charcoal at the bottom, then a layer of brimſtone, and ſo alternately three or four layers of each. On the top, ſome oakum, dipped in tar, is laid to ſerve as a match [a].

The object here is to confine the heat, and ſmoke, a conſiderable time, both being conſidered as the moſt powerful agents for deſtroying infection. "From the known and experienced "efficacy of fumigation (in reſpect to ſhips) it appears that fire

[a] Lind's Diſſertation on Fevers, 2d edit. p. 228.

BOOK VI. " and ſmoke are the moſt powerful agents for annihilating infec-
" tion, and it may be preſumed, even the plague itſelf[3]."

A great variety of ſubſtances have been recommended for the purpoſe of fumigation, and a number of compoſitions have been employed, conſiſting of a farrago of ingredients which, though they enhance the coſt, add nothing perhaps to the efficacy of the compoſition. The effects expected from fumigation depend leſs on the ſpecific quality of the combuſtible materials, than on the mode of its application, which ſhould be ſo conducted, that the heat and ſmoke may penetrate into every corner and receſs.

The following are the principal ingredients that have been employed in fumigation: ſulphur, yellow and white arſenick, nitre, charcoal, gun-powder, tar, pitch, roſin, frankincenſe, vinegar, tobacco, juniper berries, pine tops and ſhavings.

The fetid and aromatic gums, with the coſtly ſpices and balſams, may very ſafely be ſpared; and even the more common aromatic herbs, as ſage, roſemary, mint, lavender, &c. would ſeem to be not neceſſary, except in the chambers of the ſick, in compliance with common prejudice; but none of them are preferable to the ſteam of vinegar, plain or camphorated, or to gun-powder a little moiſtened.

The Italian compoſition for fumigation might therefore be reformed, leaving ſeveral of the more coſtly ingredients out, without impairing its virtue. The forms mentioned by Muratori might be thus reduced[4].

Sulphur, 5 pounds.
Orpiment, 2 pounds.
Common Frankincenſe, and
Juniper Berries, of each 3 pounds.

[3] Lind's Diſſertation on Fevers, 2d. edit. p. 229. See before on this ſubject, p. 425.
[4] Muratori, lib. i. cap. ix. p. 72.

To theſe, after being reduced to a powder, are added:
Shavings of the Pine Tree, 5 pounds.
Bran, 20 pounds.

In like manner a ſtill ſtronger fumigation is prepared, by increaſing the proportion of ſulphur, and adding one pound of White Arſenick.

The firſt of theſe two fumigations, is uſed for the purification of infected houſes; the ſecond, for Lazarettos, ſepulchers, and ſtuff more ſtrongly tainted than common furniture. A third fumigation, intended for perſons and their apparel, who are obliged to approach the ſick, is compoſed of ſulphur, aromatic gums, and ſpiceries, without arſenick[5]. But plain ſulphur, frankincenſe, pine ſhavings, and bran would anſwer equally well.

The early orders of 1603, againſt the infection of the plague, expreſsly enjoin the alternative of burning infected goods, or airing and fumigating them, as directed by the College. In 1636, and probably before, this article was confirmed by the mayor and aldermen, and ordered to be executed by the examiner. The removal of goods from infected houſes was at the ſame time prohibited, till after the expiration of two months. Both orders were repealed in 1665, by the mayor; but the College, who in 1636, had adviſed that no infected ſtuff ſhould be removed ſooner than ſix months after the ceſſation of the diſtemper in the houſe, in their advice of 1665, make no alteration in that term.

Notwithſtanding the publication of the above orders, it may be doubted whether they ever were ſtrictly, or in general, carried into execution, with a view of purifying infected houſes, after the families had retired from them. This may be inferred from Hodges's Account of the Plague's decline, in 1665, at

[5] Muratori, lib. i. cap. ix. p. 73.

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leaſt in reſpect to that year; and from the mild nature of the fumigations preſcribed, as well as the mode of employing them, they would appear rather to have been intended for the correction of the air in houſes inhabited, than for the thorough expurgation of goods highly ſuſpected: indeed had proper purification been practiſed, the terms of ſix, or even of two months, affixed for the removal of goods from infected houſes, would have been ſuperfluouſly long.†

Muratori, after remarking that fumigation was uſed anciently, in the peſtilence, ſays, the practice was brought into more general uſe, by P. Maurizio da Tolono, a Capuchin, who had great ſucceſs with it, in the plague of Genoa, in 1657. He obſerves further, that Franceſco Ranchino, and others, were of opinion, that fetid and poiſonous fumes were the moſt effectual. Declining however a deciſion of this point, he refers to the experience of the Capuchin, who delivers himſelf to the following purpoſe. "That his milder fumigation, intended for perſons obliged "to go among the infected, or otherwiſe to expoſe themſelves "to danger, was an admirable preſervative, and was uſed with re"markable ſucceſs in Genoa, in 1657; the fumigation being ap"plied to the perſon, and his clothes, before coming out from "his houſe."——He adds further, "that the application of his "other fumigations rendered the former practice, of burning in"fected or ſuſpected goods, unneceſſary; as alſo the ſhutting "up infected houſes, which being abandoned by their inhabi"tants, were left expoſed to the depredation of robbers. He "acknowledges, that infected goods may be purified by proper "expoſure to the air, but then a ſpace of forty days is requiſite "for their purgation, during which time they are ſubject to "many inconveniences, beſides being ſpoilt by the rain, or ſtolen "by thieves: whereas, by his method, twenty-four hours are "ſufficient for the purifying not only houſes, with their fur"niture, but even Lazarettos, and the infected beds of the ſick." Muratori ſubjoins two inſtances of the good effects of fumiga-

† Journal of the Plague Year, p. 261, 267.

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tion, at Venice, in 1576; and at Malta, in 1675; and gives ſeveral inſtances of the bad conſequences of the neglect of ſuch precautions, at Rome, in 1656; at Marſeilles, in 1649; and at Modena, in 1630, alſo at Palermo, Florence, &c.[6] CHAP. VI.

Notwithſtanding theſe authorities, in favour of fumigation, Dr. Mead appears to think the practice injudicious, if not prejudicial, the fumes of vinegar, and perhaps brimſtone excepted, founding this opinion chiefly on the practice of the Arabians, who, he ſays, recommend the keeping the houſes cool and airy, and ſtrewing them with cooling herbs, as roſes, violets, water lillies, &c. ſprinkling them at the ſame time with vinegar. But I apprehend there is a little inaccuracy in this repreſentation of the Arabian practice; for though the Arab writers certainly recommend the keeping the houſes cool, &c. they are far from condemning fumigation with aromatic herbs, and gums. The fact is, the Arabians made a very material diſtinction, which the Doctor ſeems not to have attended to, namely, between the regimen for perſons lying ſick in peſtilential diſorders, and perſons, yet in good health, uſing precautions for their preſervation. The cooling regimen was recommended to the former; but to the latter were recommended, amongſt other things, ambergriſe, aloes wood, muſk, frankincenſe, ſtorax, ſandarac, and aſſafœtida; alſo the chewing of cloves, maſtic, labdanum, &c. beſides various aromatic compoſitions, to be taken internally[7]. Doctor Mead is therefore miſtaken when he aſſerts the Arabian practice to be directly contrary to what modern authors moſtly adviſe, which is, "to make fumes with hot things, as benzoin, frankincenſe, aſſafœtida, ſtorax, &c. from which I ſee no reaſon to expect any virtue to deſtroy the matter of infection, or to keep particular places from a diſpoſition to receive it, which are the only things to be aimed at[8]."

[6] Muratori, lib. i. c. ix.

[7] Avicenna, lib. iv. fen. 1. Tract. 4. chap. 4.

[8] Mead, p. 121.

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It may be difficult to conceive in what manner theſe fumes operate, in deſtroying the matter of infection; and, till the matter of infection be better underſtood, it will not be more eaſy to account for the operation of the fumes of vinegar, or ſulphur, which Doctor Mead admits to be uſeful; but his doubts derive no ſupport from the practice of the Arabians, (who, he thinks, were beſt acquainted with the nature of the peſtilence) in as much as they uſed the very ſubſtances he condemns: nor has he produced any evidence for hot fumes being generally uſeleſs. "As hot "fumes, (ſays he) appear to be generally uſeleſs, ſo the ſteams "of poiſonous minerals ought to be ſuſpected as dangerous; and "therefore, I cannot but diſſuade the uſe of all fumigations "with mercury or arſenic[9]."

Arſenical fumigations are uſed only for the purification of houſes, and furniture ſtrongly infected, and experience has not ſhown them to be prejudicial: whether they add any thing to the efficacy of the other ingredients, is another queſtion. Lind mentions the addition of arſenic to charcoal fires, and brimſtone, for the purification of infected ſhips, without expreſſing any apprehenſion of dangerous conſequences, if the people, employed in the proceſs, retreat immediately upon ſetting fire to the materials[10]. He obſerves, that the fumes of charcoal and brimſtone do not deſtroy ſome ſpecies of vermin, particularly lice, but does not ſay, whether or not they are deſtroyed by arſenical fumigation. He has known wood fires, ſprinkled with brimſtone, ſtop the contagion of the ſmall-pox[11], "in a word, (ſays he) a ju-"dicious and proper application of fire and ſmoke is the true "means appropriated for the deſtruction, and utter extinction, "of the moſt malignant ſources of diſeaſe."

[9] Mead, p. 122.
[10] Lind, p. 229.
[11] Ibid. p. 232.

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The materials found ſo ſucceſsful by Lind, were tobacco, charcoal, brimſtone, and wood. The more coſtly gums, perfumes, aromatic herbs, woods, and ſeeds, may perhaps add to the elegance, though not to the efficacy of the various compoſitions employed for purgation of infected ſubſtances; but there appears no reaſon, from experience, for thinking they impair the virtues of vegetable ſmoke, or that, from their heating qualities, they can prove prejudicial to inanimate ſubſtances.

I have collected the above authorities, with a view to reſcue the practice of fumigation, as a means of purifying infected goods, from the derogation implied in Doctor Mead's manner of expreſſing himſelf on the ſubject; and I am alſo obliged to differ from him, in what follows, "when the ſick families are removed, all "the goods of the houſes, in which they were, ſhould be burnt, "or rather buried deep under ground - - - and moreover, the "houſes themſelves may likewiſe be deſtroyed by fire, if that "can conveniently be done, that is, if they are remote enough "from others; otherwiſe it may ſuffice to have them thoroughly "cleanſed, and then plaſtered up[12]."

The burning of houſes in a town muſt, for the moſt part, be attended with danger; and the burning of furniture, &c. has been found by experience to occaſion dangerous concealment, and theft, beſides many other inconveniencies. Fumigation, in many inſtances, has proved ſucceſsful, and, if adopted previouſly to the plaſtering the houſes, the workmen employed would run leſs riſk of infection.

At the ſame time it muſt be confeſſed the ſucceſs aſcribed to P. Maurizio ſeems ſomewhat exaggerated; for it would appear that he practiſed in the decline of the plague, when the diſtemper in itſelf is leſs contagious. An Auguſtine Father, who was very active in one of the Lazarettos of Genoa, in 1657, and who

[12] Mead, p. 108.

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gives a minute detail of that, and all the other Lazarettos, remarks, that ſeveral of thoſe employed in purifying the houſes were themſelves infected; and though he gives them all due credit for expoſing themſelves ſo boldly, for the public good, he doubts the utility of their operations[13].

The principal objections to fumigation made by this Father, were, firſt, the impoſſibility of fumigating all the infected ſubſtances contained in a city which has juſt before been ravaged by the plague: ſecondly, that the operation is unneceſſary, becauſe ſuch ſubſtances loſe their infectious property when the peſtilential ſeaſon terminates; and laſtly, that in the beginning of a plague, danger may be apprehended from thoſe employed as fumigators ſpreading the infection in parts of the town not before infected. In reſpect to the firſt and ſecond objection, I ſhall refer to what has already been ſaid on the ſubject, on former occaſions, in this work[14]; and the conſequences apprehended in the third, might be prevented by not permitting thoſe employed in fumigating infected houſes to enter ſuch houſes as are yet ſound, and which only have recourſe to fumigation as a preſervative.

Doctor Mead thinks the objections made to fires in the ſtreets, in the time of peſtilence, may be applied to the firing of guns, which ſome have too raſhly adviſed[15]. Dr. Lind alſo objects to the "burning large fires in the open air, in the ſtreets, and about the walls of town—as they may perhaps produce a conſumption and a deſtruction of that principle in the air which is equally the food of animal life and of fire[16]"—but theſe objections do certainly not apply to the firing of guns, which is only a kind of fumigation, and which may be indeed of little ſervice in the wide

[13] Lazaretti deilla Città & Riviere di Genoa del. 1657, da Antero Maria da S. Bona Ventura, ſcalzo Agoſtiniano. Gen. 1658. cap. xxxi. lib. iii.

[14] See page 269, 272, 283, 293, and book v. chap. v. p. 422 to 427.

[15] Mead, p. 119.

[16] Lind on Fevers, p. 230.

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ſpace of the open air, but cannot be reckoned prejudicial, like universal fires in the ſtreets of an infected town. At any rate it cannot be termed a raſh advice; for it had long been a ſtanding article in the advice of the College of Phyſicians, of London, and was repeated in 1665. But the fumes of gunpowder are recommended by Lind, next to the ſmoke of wood, for purifying tainted air, that is, where applied properly; and they have the additional advantage of being quite inoffenſive to the lungs, ſo as to be uſed in the chambers of the ſick[17]. CHAP. VI.

In my opinion, little benefit can be expected, either from making univerſal fires, or firing great guns; though I think it very doubtful whether the great mortality at London (no leſs than four thouſand in one night) can juſtly be imputed to the fires made in the ſtreets. Hodges himſelf was at a loſs whether to aſcribe it to that cauſe alone, or to the heavy rains which fell at the ſame time †, and were followed by a wet conſtitution of air.

The experiment was injudiciouſly made, when the plague was increaſing very faſt. In the laſt week of Auguſt, there died ſix thouſand one hundred and two; in the firſt week of September, ſix thouſand nine hundred and eighty-eight. It was in the interval, between the firſt and the third week, that the fires were made; therefore if the mortality ſo remarkably increaſed in one night, it muſt have as remarkably decreaſed in ſome of the others; for the burials, in the ſecond week, appear to have been fewer than in the firſt. In the third week of September, the diſtemper got to its height, and after that decreaſed[18].

The experiment of kindling fires in the ſtreets was tried likewiſe at Marſeilles, without ſucceſs; but not in the ſame manner as at London, either as to the period, or the mode, of its appli-

[17] Lind, p. 234

[18] See table, book iii. p. 276.

† Loimologia, p. 20.

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cation. At Marſeilles, the fires were made in the public ſquares, and round the walls of the town; each houſekeeper, at the ſame hour, being adviſed to make a fire before his door, and to fumigate the interior of his houſe, with ſulphur, expoſing, to the ſmoke within, whatever had been in uſe ſince the beginning of July[19]. This operation, by the advice of M. Sicard, was to be repeated three nights ſucceſſively, but it appears to have been made one night only, for the ordinance was publiſhed the ſecond of Auguſt, and on the third the fires were foreborn[20].

The period of making the experiment was alſo different; for in the beginning of Auguſt the plague at Marſeilles had only begun to increaſe; whereas, at London, before the fires were made, it had made great progreſs, and indeed had very nearly reached its height. If the experiment, at Marſeilles, had been deferred till September, the rapid progreſs of the diſtemper, in the firſt fortnight of that month, would probably, as at London, have been imputed to the fires. At Toulon, in 1721, fires were made univerſally in the ſtreets, with equally ill ſucceſs[21].

From the application of fire and ſmoke, in the manner above deſcribed, little benefit can be expected, at any period of the plague. Where the diſtemper has already ſpread far, the ſick may be injured, or at leaſt incommoded, by the heat and ſmoke; and in reſpect to perſons yet ſound, or infected furniture, they would receive more certain benefit from an application made in the interior of the houſes, than in the open air. Early in the ſeaſon, when the diſtemper is confined to two or three ſtreets, the making fires, univerſally in the town, muſt be ſuperfluous. Smoke can certainly be of no ſervice as a cure for the diſeaſe; and as a preſervative for thoſe in health, it would ſeem to be chiefly of uſe in extinguiſhing, or expelling the infection that may happen

[19] Relat. Hiſtor. p. 86.

[20] Journal of the Plague at Marſeilles, p. 10. 12.

[21] Van Swieten Comment. ſect. 1407. vol. v. p. 165.

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to adhere to their clothes, or other things around them, in which view, much cannot be expected from fires made in the open air. Whether fires made round a district strongly infected, or round a heap of putrifying bodies, to preserve contiguous places from the pestilential effluvia, may not be of service, will admit of more doubt; especially if it be supposed that the infectious particles are rendered inert, or are destroyed, in their passage through a dense smoke[22].

On a supposition of this kind, fumigation is employed as the means of preserving those from contagion who expose themselves in the chambers of the sick; but from the impossibility of powerfully applying it, in this case, without incommoding the sick, it is not much to be depended on. The materials used for this purpose, are benzoin, myrrh, amber, mastic, storax, juniper berries, pitch, &c. formed into little rolls with common gum mucilage: sulphur is sometimes added. From these forms, such ingredients should be rejected as are offensive to the sick; and, in point of efficacy, perhaps nothing is preferable to gunpowder moistened, or the steams of vinegar.

Besides fumigation, various remedies are recommended, as preservatives, external and internal. Of the first kind, some are to be carried in the hand, or worn about the body, or otherwise applied externally. Little need be said of the ingredients of which the small bags, balls, ointments, or amulets are composed, as

[22] Doctor Moreland proposed wood fires to be made, not in every street, but "(in the beginning of the infection) in or near such places as may be supposed "likely to furnish considerable quantities of the hurtful vapours, that by attacking "them as it were in their quarters, we may prevent their excursions." He did not hope to cure those already infected, but to obstruct the beginning of the infection. He thought coal fires, and others which fill the air with sulphurous vapours, hurtful. *Treatise of the Plague, by Dr. Moreland of York, p.* 17. *Lond.* 1721. I know not what could be Moreland's objection to coal fires or sulphurous vapours, which have generally been recommended by others. See Hoffman's Medical System, t. ii. p. 236. See again on this subject, Van Swieten, vol. v. sect. 1407.

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they have no juſt claims to the title of antidotes, and are for the moſt part either the offspring of empirical craft, or are mere innocent devices, to give confidence to thoſe under the neceſſity of approaching the ſick. In this laſt view, ſuch as can do no harm may be admitted, in compliance with popular notions; but amulets of poiſonous, or doubtful quality, ſhould be admitted with more caution, or rejected[23]. Some of the perfumes ordered by the College are perhaps as proper as any; but their forms ſhould be rendered more ſimple, excluding coſtly ingredients, or ſuch as are procured with difficulty. No difference, perhaps, ſhould be made between compoſitions of this kind intended for the rich or the poor; the latter, by their ſituations in life, ſtand moſt expoſed, and ſhould not have their confidence in the defenſative leſſened, by the reflection that their poverty muſt deprive them of the moſt efficacious. The pomander preſcribed for the richer ſort, by the College, contains lignum aloes[24], which can be of no poſſible uſe, when incloſed in an ivory box, becauſe it emits its ſcent only when much heated, or burning.

Many of the people of Aleppo carry a little ball of labdanum in their hands; or ſmell to vinegar in which rue has been ſteeped.

As to internal preſervatives, the number of ſimples recommended, under the title of antidotes, is much greater, and the compound forms are in general moſt unjuſtifiably complex. Medical books are filled with them, and with eulogies on their approved efficacy. The reader may find a copious collection in Muratori[25], upon which it is needleſs to comment.

The College, at London, in 1665, made ſome alterations, on the head of *Inward Medicines*, leaving out a very few articles of

[23] Muratori, lib. ii. c. p. 129. See alſo a Treatiſe of the Plague, by Thomas Lodge, M. D. Lond. 1603.

[24] Advice of the Phyſicians, xii.

[25] Muratori, lib. ii. c. iii.

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the old forms, and ſubſtituting others in their place, ſome of which do not appear to have any juſt claim to ſuperior efficacy. Among the principal new compoſitions introduced, are ſome medicated ales, diſtilled waters, and two or three electuaries; of all which the ingredients are ſuperfluouſly multiplied. Among the old compoſitions retained, is one calculated for the rich, and which ſtands diſgraced by the following ingredients; oriental bezoar, pearl, hyacinth ſtone, unicorns horn, and lignum aloes: the proportion of the laſt article being about three grains to four hundred and fifty of the other ingredients.

In the Epiſtle, dedicatory, prefixed to the advice of the College in 1665, it is ſaid, "We have been tender in omitting many "forms and preſcripts, which by reaſon of the plainneſs and "homelineſs of them, we looked upon as very obnoxious, to be "cenſured and vilified, eſpecially by perſons pretending to rare "preparations and ſecrets: we conſidered that our predeceſſors "(amongſt whom were then the moſt eminent phyſicians in "England, and ſuch as had experience of plagues in their times, "raging to a far greater height than through God's mercy any "hath done ſince) might ſee juſt cauſe, upon their experience "and ſucceſs to bring them in."

But it is to be hoped, whenever the College come to reviſe their public advice, that the ſame ſcrupulous delicacy will no longer reſtrain their corrections. Indeed the ſame reaſon for delicacy, no longer exiſts; for the reigning prejudices in favour of names, and authorities, which at that time rendered a cautious reſpect, in ſome degree, neceſſary, have, in the long interval which Britain has providentially enjoyed free from the plague, either been conſigned to oblivion, or retain little of their former influence over the minds of men.

The reformation that in the preſent century has taken place in moſt of the European Diſpenſatories, more eſpecially in Britain,

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has diſencumbered the Materia Medica of many uſeleſs articles; and the later improvements in pharmacy, joined with the modern more ſimple mode of preſcription, have prepared the way for high improvement in medical directions for the prevention and cure of the plague, without danger of offending popular opinions.

In a calamity, to which all are liable, all are entitled to the moſt effectual preſervatives, or remedies, that can be procured; and, invidious diſtinctions being laid aſide, the liberality of an opulent public will furniſh thoſe with ſuch remedies, who have themſelves not the means of purchaſing them. Indeed it providentially happens, that compoſitions of pompous form, and high price, very often owe their repute to ingredients of imaginary virtues, liable, from their coſt, or their rarity, to adulteration, and which, for the moſt part, might ſafely be left out altogether, without detriment to the power of the remedy.

All complex domeſtic remedies are exceptionable, in times of the plague. There is not leiſure, as at other times, to collect the various herbs, or other ingredients, and the want of any one of them, may by the vulgar be conſidered as a material defect. In extemporaneous preſcriptions, the eaſe of the apothecary ſhould alſo be conſulted, by having a few official compoſitions eſtabliſhed by authority, which, in diſpenſing, would require little more than merely to meaſure or to weigh. Neither the phyſician's time, nor that of the apothecary, ſhould be waſted in long receipts, or in varying forms for the gratification of caprice. Remedies, of real utility, may be diſpenſed to one hundred patients, in the time that is required to the making up a few finical preſcriptions, for half a dozen.

The preſervative remedies, external as well as internal, publicly recommended, ſhould be few in number, to prevent people from being perplexed in their choice. The ſelection of ingredients ſhould proceed on the principle already laid down by the College,

College, the preference being given to "ſuch as are eaſieſt un- CHAP. VI.
"derſtood, procured and prepared; and moſt of them at little
"charge for the poor."

It ſeems highly expedient, that ſome compoſitions, under the denomination of preſervatives, ſhould be prepared, with the ſanction of the College, and ſold at eaſy rates. Many perſons will never think themſelves ſecure, without ſomething of that kind, and where they cannot find antidotes regularly recommended, will be the more eaſily tempted to have recourſe to every boaſting impoſtor, who offers his noſtrum: of which numbers, at ſuch times, are always ready to take advantage of the public credulity[26].

At the ſame time, it muſt be confeſſed that preſervative internal remedies do not appear to be neceſſary, for perſons in good health, and, except where there is a ſtrong prepoſſeſſion in their favour, may ſafely be omitted. A temperate courſe of life, and temperate indulgence in cuſtomary liquors, promiſe every advantage that can be expected from cordials, and ſtomachics. To valetudinarians, hypochondriacal perſons, and others of weak nerves, or diſturbed digeſtion, ſomething medicinal, beſides wine, may perhaps become requiſite for the bowels, and for preſerving a conſtant and ſalutary moiſture on the ſurface of the ſkin; but inanition, and ſudden changes in diet ought to be avoided; and all evacuations ought in general to be proſcribed, in reſpect to thoſe who are obliged to go into the way of infection.

Terror, deſpondence, and other debilitating affections of the mind, have been univerſally held of moſt dangerous tendency, in times of peſtilence. On the contrary, a regular flow of ſpirits, a temper not given to anticipate evils, or, when they happen, to

[26] Hodges Loimologia, p. 21. Journal of the Plague Year, p. 36.

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brood over them, and a lively hope of eſcaping the infection, are conſidered as the beſt ſafeguards againſt contagion[27]. But theſe are not in the power of medicine to beſtow; they are the bleſſings of natural conſtitution, and, where wanting, muſt be ſought in a chearful aſſociation with others who poſſeſs them, and by engagements that divert the mind from the contemplation of melancholy objects.

As preſervatives againſt the plague, iſſues have been highly recommended, and by ſome authors are repreſented as almoſt infallible[28]. I never had an opportunity of ſeeing them opened on purpoſe, with this view; and perhaps when a perſon has been ſome time accuſtomed to them, they may, in ſome degree, loſe their preſervative effect. Multitudes, of both ſexes, at Aleppo, had iſſues in their arms, it being there a very common remedy in a variety of chronic diſorders: but, notwithſtanding theſe out-lets, numbers periſhed; and I did not remark that thoſe who had them, were in any degree leſs liable than others to be infected.

A ſimilar remark may be made in regard to tobacco, ſo much recommended by Diemerbroeck, and others[28]. The cuſtom of ſmoking is univerſal among both men and women of all ranks, at Aleppo. This too, from its being habitually practiſed, might perhaps loſe part of its prophylactic virtue: at the ſame time, thoſe who uſe it as a preſervative, muſt always be ſuppoſed in ſome degree accuſtomed to it, otherwiſe the violence of its operation, on moſt perſons upon their firſt beginning to ſmoke, might prove hurtful. It ſhould further be obſerved, that the tobacco commonly uſed in Syria is much milder than the American, and that the Oriental ſmokers ſeldom, or never ſpit.

[27] Muratori, lib. iii. cap. ii.

[28] See a variety of authorities cited by Muratori, lib. ii. c. ii. p. 121. and Orræi Deſcriptio Peſtis, p. 139.

[29] Ibid. p. 139.

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It is a truth, not to be concealed, that a ſpecific preſervative againſt the plague remains hitherto among the medical *deſiderata.* In what that particular ſtate of the human body conſiſts, which ſeems to render ſome, for a long courſe of time, unſuſceptible of infection, is ſo entirely unknown, that medical art, at a loſs what to add, or what to take away, cannot act upon any general principles of practice; nor is any medicine yet diſcovered, of power to alter or deſtroy the peſtilential poiſon, when about to invade a ſubject prediſpoſed to its reception.

A ſtrong application of fire and ſmoke has been found by experience to deſtroy the contagious particles, or to expel them from certain ſubſtances to which they ſtrongly adhere, diſperſing them in the air, where they are ſoon diluted, or become inert. But the human frame, could it ſupport ſuch an application, would receive little benefit from it, if infected; nor could thoſe yet in health ſuſtain, without prejudice, the heat and denſe ſmoke, which is probably required for the perfect extinction of the infectious effluvia, floating in the confined atmoſphere of a morbid body. The milder fumigations, already mentioned, have therefore been contrived, for thoſe who enter the chambers of the diſeaſed, which, without incommoding the patient, may perhaps prove of ſome ſervice to the attendants.

At the ſame time, thoſe immediately about the ſick, ſhould pay ſome regard to other precautions, uſually recommended. They ſhould guard the mouth and noſtrils with vinegar, avoid drawing breath when cloſe to the bedſide, or ſwallowing their ſpittle while they remain in the infected chamber. Before approaching the bed, in order to examine the eruptions, the bed-clothes ſhould be removed, to give time for the diſperſion of a confined ſteam, which immediately diſcovers itſelf to the ſenſes; and it will be adviſable to dip the hands in vinegar, before handling the parts. Upon coming out of the chamber, it is proper alſo to rinſe the mouth, and waſh the hands, with

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vinegar, plain, or camphorated, and to fumigate the clothes with a little nitre, ſulphur, and juniper berries, burnt on a hot iron.

Upon returning home, it may be adviſable to ſhift clothes immediately, hanging thoſe taken off upon lines, in a ſmall chamber, to be again ſmoked, and afterwards aired. The mouth and hands ought to be once more well waſhed, and the hair might be fumigated with a little ſulphur and nitre, by means of a pipe, ſo as not to incommode the lungs.

A glaſs of generous wine, or any other cordial more agreeable to the choice, may be taken before dinner, in caſe of languor, or oppreſſion at the ſtomach, from fatigue, fetor, or apprehenſion. I found a rummer of old hock very grateful, on ſuch occaſions, in the hot weather.

It is a general and rational precept, never to go abroad faſting. I do not conceive there is any neceſſity for making alteration in the cuſtomary breakfaſt, by the addition of any ſuppoſed antidote, diſguſtful to the palate; for which reaſon medicated ales, tinctures, or other preſervatives, where judged uſeful, had better be taken ſeparately, before, or after, breakfaſt. A ſpoonful or two of Huxham's tincture of bark, (of which I happened to have a quantity ready) was the only internal preſervative I ever took myſelf. It was taken an hour after breakfaſt, diluted with an equal quantity of water. For thoſe who cannot eaſily bear fatigue without eating between breakfaſt and dinner, ſome light food may be proper, at an intermediate hour, in order to avoid going into the chambers of the ſick with an empty ſtomach, in the forenoons. In ſuch circumſtances, after a long and fatiguing morning, I have found myſelf diſagreeably affected, in my latter viſits, and have been ſenſible of ſlight giddineſs, and of the appetite flagging at dinner, as if ſomething lay on the ſtomach. I have known others much more ſtrongly affected in this manner, and conſequently more alarmed.

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In ſuch caſes, much no doubt may depend on the power of fancy; but in thoſe times the imagination requires management. So intimately is it connected with the accidental ſtate of the body, that the ſame riſk, from which a man ſhrinks in a ſtate of languor and fatigue, he will encounter undauntedly, after a temperate meal: the ſtrange, unuſual ſenſations, which amount almoſt to a perſuaſion of having caught the infection, will often, like the phantoms of a viſion, vaniſh after a few glaſſes of wine. Whether any ſlight degree of real infection can be thus diſſipated, I ſhall not take upon me to determine; it is ſufficient for the preſent purpoſe to indicate the means of reſtraining thoſe alarming ſenſations, which, when aggravated by imagination, are apt to depreſs the ſpirits, and, according to the general opinion, to reduce the human frame to that relaxed, inhaling ſtate, peculiarly ſuſceptible of contagion.

IN page 450, ſpeaking of the Quarantine Act of the 26th of George the Second, it is ſaid, "it has hitherto required no "amendment, except in changing the ſtation of infected "ſhips from New Grimſby to St. Helen's Pool; and in an "explanation of the clauſe relative to Lazarettos, by an act in "the 12th year of his preſent Majeſty."

When the above paragraph was written, I was ignorant of a late act, paſſed in the year 1788†, entitled, "An Act more "effectually to ſecure the performance of Quarantine, and for "amending ſeveral Laws relating to the Revenue of Cuſtoms."

By this act, the commander of a ſhip is required to give a true anſwer to the following queſtions, in addition to the interrogatories recited in the former act of George the Second, viz. Whether his ſhip or veſſel touched at the *Iſle of Rhodes*, the *Morea*, or any part of the Coaſt of *Africa*, within the Mediterranean or the Levant Seas, or the Port of *Magadore*; or, whether any of the ſhip's *Company*, or any other perſon on board, his ſhip or veſſel, had, during the voyage homewards, in any manner whatever, any communication with any ſhip or veſſel coming from any of thoſe places? What pilot or pilots, or other perſons from the ſhores of the kingdom of Great Britain, &c. have been on board his ſhip or veſſel, or had any communication with the ſhip's company, in any manner whatever, during his voyage homeward? And, whether any of his ſhip's company had been ſick, and of what diſorder, in the courſe of

† Anno 28 Georgii III. cap. 34.

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the voyage, or were ſo at the time the particulars are demanded? —In caſe of giving an untrue anſwer, the commander forfeits 200 l., for each offence.

It is further enacted, "That it ſhall not be neceſſary to give any actual notice of any orders of his Majeſty in Council, or of any regulations therein contained which are now in force touching and reſpecting quarantine—and that it ſhall be lawful for his Majeſty, &c. by any order or orders in Council hereafter to be made, to limit and fix a time, after which, the publication of ſuch order, in the London Gazette, ſhall be deemed ſufficient notice."

By a third clauſe it is enacted, "That after the firſt of January, 1789, every commander of a ſhip liable to quarantine, in caſe of meeting with any ſhip or veſſel at ſea, or within four leagues of the coaſt of Great Britain or Ireland, or the Iſles of Guernſey, &c. ſhall hoiſt, in the day-time, a yellow flag at the main-top-maſt head; and for the night, a light at the ſame top-maſt head; as a particular ſignal to denote that the veſſel is liable to quarantine. The commander, in caſe of neglect, forfeits 200 l."

In page 482, mentioned is made of a bill which paſſed the Houſe of Commons, in 1665, for ſupplying the defects of the Act of James the Firſt, relating to the plague, and for providing remedies to prevent the ſpreading of the contagion. Several conferences with the Lords on the ſubject of the bill were held, but it does not appear in the Journals of the Commons, what were the matters agitated in thoſe conferences.

From the Journals of the Lords † it appears, that the Earl of Bridgewater, on the 30th of October, reported to the Houſe, "that the Committee have conſidered the bill for making fur-

† Vol. xi.

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ther proviſion for ſuch as be infected with the plague;" to which their Lordſhips have added two proviſos, and made ſome alterations and amendments therein, which were offered to the judgment of the Houſe.

The bill with theſe proviſos and amendments having paſſed, was returned to the Commons, who thereupon deſired a conference, in which, on the 31ſt of October, they ſay, that to ſhow their willingneſs to comply with their Lordſhips, they agree to all the amendments. But as to the three proviſos added by their Lordſhips, the Commons do not agree to them, for many reaſons which were declared.

The Lords, upon conſideration of what was offered at the conference, agreed to leave out the proviſo concerning inmates, and agreed to leave out thoſe words (perſons of note and quality) in the proviſo inhibiting peſt-houſes and church-yards to be built near the houſes of Peers; but adhered to have Peer's houſes prevented from ſuch annoyances. This Houſe likewiſe adhered to the proviſo for exempting the Houſes of Peers to be ſhut up at the diſcretion of conſtables.

A free conference was deſired by the Lords; and in the afternoon of the ſame day, a meſſage was ſent from the Commons, deſiring a conference concerning the matter of the laſt free conference.

The Commons adhering to their former votes, the affair ended.

APPENDIX.